THE IMPLEMENTATION OF SYSTEMATIC NURSING IN SELECTED HOSPITALS IN INDIA: A CHRONICLE OF THE CHANGE PROCESS

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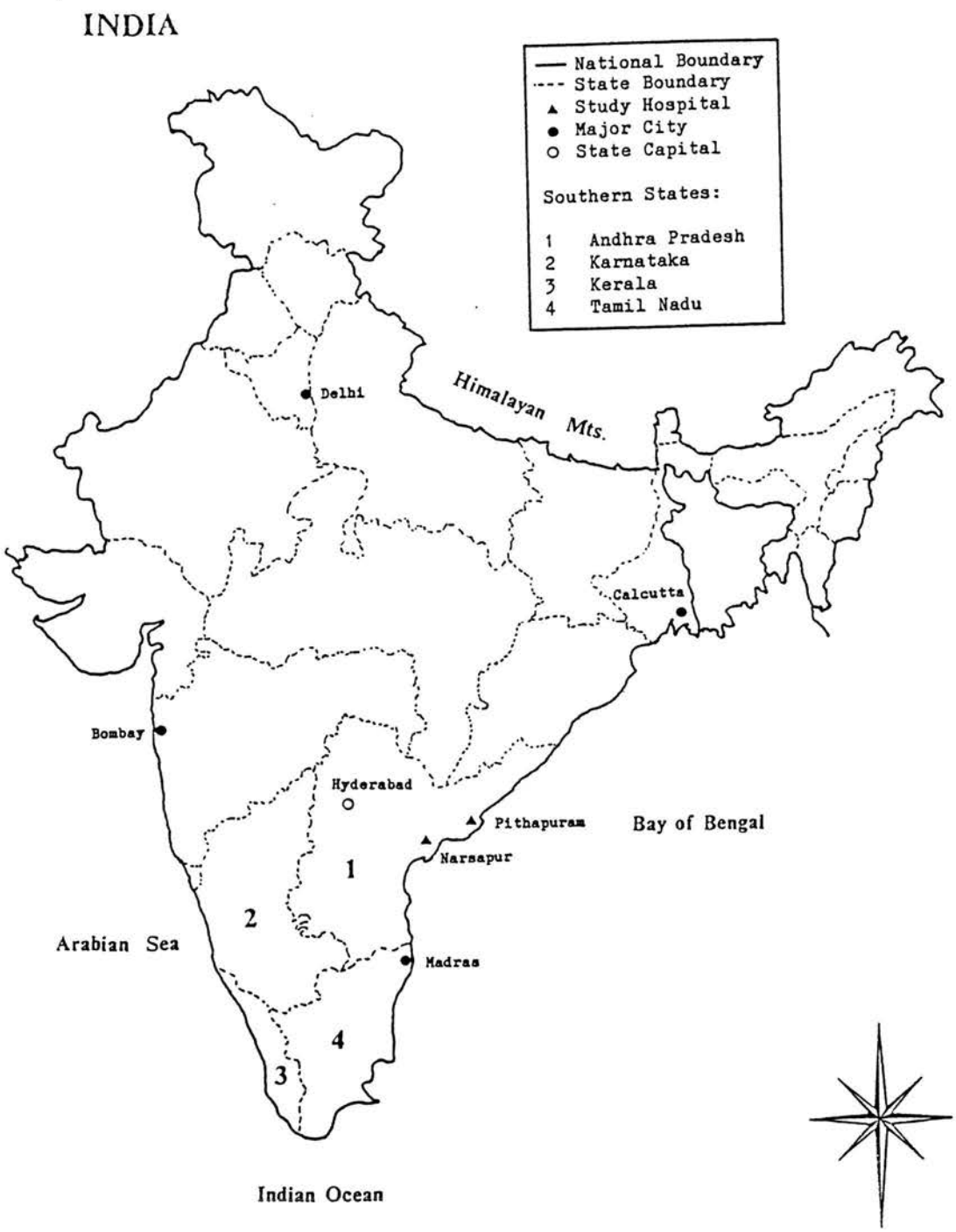
DECLARATION

I declare that this thesis is my own work and that it describes research planned and carried out by me.

To my father, Israel Sirra, who foresaw this work, and to my foster father, Albert George Phair, who educated me over the years.


INDIA
National Boundary
State Boundary
Study Hospital
Major City
State Capital
Southern States:
1 Andhra Pradesh
2 Karnataka
3 Kerala
4 Tamil Nadu
Delhi
Himalayan Mts.
Calcutta
Bombay
Hyderabad
Pithapuram
Narsapur
Bay of Bengal
Arabian Sea
Madras
Indian Ocean

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ABSTRACT

This study presents a chronicle of the change process involved in the implementation of systematic nursing in two hospitals in India. The theoretical foundation of the study is drawn from systems theory and planned change theory. Action research methods were employed and the study was conducted in phases. An exploratory study was undertaken involving participant observation and unstructured interviews. The existing system of nursing practice was found to be traditional, task-oriented and ritualistic. Preparations for change, including a teaching programme, were carried out over a three month period, and data collecting tools were developed. Two male medical and surgical and three female medical and surgical wards (altogether five wards) were involved in the study. A period of six months was spent on the implementation of systematic nursing. The nurse managers, educators, ward sisters, trained nurses and general nursing students were involved in the change process.

The study suggested that a model of planned change was necessary in order to implement systematic nursing. It was concluded that an education programme is necessary to prepare nurses to participate in such a change process. The managerial support and involvement of all those who were concerned with the change was deemed essential. Implications arising from the present study for the development of systematic nursing in research, nursing education and practice are outlined.

CHAPTER 1

INTRODUCTION

BACKGROUND TO THE STUDY

The research described in this thesis originated from the researcher's experience in the Mission Hospitals sector of India's nursing service. Interest was further stimulated while working with the Board of Nursing Education, South India; also the West Bengal Nursing Council. In her professional career both as a nurse educator and administrator the researcher had opportunities to work closely with the tutors, students and clinical staff who showed interest in a problem-solving approach to nursing practice. The terms 'comprehensive nursing care', 'patient-centered care' and 'the problem-solving approach' are being integrated into nurse education, but no attempt has been made to implement systematic nursing in any of the other hospitals in India.

A number of changes have taken place in the health care system in India during the last decade. The Government of India is aiming at providing comprehensive health services to all people in India. Simultaneously the role of the nurse is also changing to meet this demand. This expanding role necessitates a systematic problem-solving approach in nursing. The need to implement systematic nursing became more apparent as it is a means to provide comprehensive and individualised nursing care. In order to obtain a better understanding of this concept it is essential to provide a brief history of the health care system and the development of nursing in India, as a background to this study.

India as a Country

India is also known as a sub-continent due to its vastness and diversities of languages, religions, cultures and climatic factors. The beautiful Himalayan mountains in the north, the Indian ocean in the south, the Bay of Bengal in the east and the Arabian sea in the west form the boundaries of India (see map, frontispiece). The republic of India comprises 31 states and union territories, 300 districts and more than half a million villages. The population of India is over 700 million people; 80% of them live in rural India (see Figure 1.1. and 1.2.). Each state has its own language. Being the official language, English is widely spoken. Hinduism, Buddhism, Sikhism, Islam and Christianity are considered to be the main religions, even though there are several others. Indians have religious freedom and their religious beliefs are respected. Cultural differences of each state make the nation culturally rich. In the north of India the weather tends to be either bitterly cold or unbearably hot. The hottest month is May, with the monsoon rains in July to September. Southern India is hot and humid and in Eastern India the monsoon starts in mid June and lasts usually until October. Agriculture is the main occupation.

As India is still a developing country, poverty, ignorance, illiteracy, poor sanitation, communicable diseases, over population, poor economic status, lack of communication networks and transportation facilities, and lack of medical aid remain national problems.

Figure 1.1 A village scene: Southern India

Figure 1.2 A town scene: Southern India

HEALTH CARE IN INDIA

Health is a state concern in India, that is overall manpower planning and health policies are under the direct control of the Government of the states. However, the Government of India provides substantial financial assistance to state Governments in carrying out several health programmes, concerned with smallpox eradication, malaria control, leprosy control, control of tuberculosis, blindness; and school health, family planning and welfare.

According to the report of the Commonwealth Medical Conference, 1977 (hereafter referred to as CMC, 1977), the general policies relating to health care in India have been, firstly, to increase curative facilities; and secondly to increase preventive care services. The goal is to take these to the grass-root levels. Towards this goal the Government has aimed at setting up primary health centres, hospitals at district level, and sophisticated medical services at regional level.

The health care system in India is concerned with the provision of comprehensive health care to all people with a view to attainment of health for all by the year 2000AD. The concept of primary health care is a new approach to meet the health and medical needs of the rural population. It was hoped that through the primary health centres and sub-centres, health and family planning services could effectively reach the rural areas. Even though there are 5,373 primary health centres and 37,931 sub-centres in the country, it is still impossible to meet all of the health and medical needs of the country. The following are the functions of the primary health centres according to CMC (1977):

- to provide medical relief
- control of communicable diseases
- maintenance of environmental sanitation
- health education
- school health programme
- nutrition demonstration
- maternity and child welfare and family planning.

According to the report of Harner and Lehman (1983) the multi-purpose health workers scheme was first introduced in 1975. The purpose of the scheme is to provide adequate medical care and to educate the rural people in the matters of preventive and promotive health. This scheme also aimed at encouraging participation of people in the health care programme thus generating the necessary commitment in them for their own health. Under the multi-purpose health workers scheme, every village with a population of 1,000 is expected to select its own representative who belongs to the community, enjoys its confidence and has the sincerity and competence to serve them. These workers are called health workers. They are trained in the fundamentals of the health scheme measures for maintaining good health, hygiene, treatment of common infectious diseases, maternity and child care, treatment of common ailments and first aid.

Deliveries take place mostly in the village houses under the care of unqualified and untrained midwives called 'dais'. The new scheme envisaged the training of one dai in every village. A brief period of four weeks training is being given to the dais in elements of pre, peri, and post-natal care of women. They are provided with a kit containing simple, safe delivery apparatus. It is also expected that

the dais propagate the small family norm amongst women. It is hoped that the dais and health workers together in the course of time would narrow the gap that exists between the medical services and the rural community.

It has been estimated that about 50% of doctors are in private practice, 45% in the public sector and the remaining 5% in private sector employment. Of those in the public sector 70% are employed by the State Government as against 30% by the Central Government.

Kakar (1983) and Seetalakshmi (1983) report that Indian systems of medicine such as Ayurvedic, unani, homeopathy, naturopathy and yoga are widely practised by trained as well as untrained practitioners. In a vast country such as India differences exist in health practices and availability of medical care. However, the health care system of India is committed to the attainment of the goal of health for all by 2000AD, through the provision of comprehensive health services. This requires education and reorganisation of health care round the health problems of individuals and the community at large.

Hospitals in India

The hospitals in India mainly fall into three categories: 1) Government hospitals; 2) Privately owned hospitals; 3) Mission hospitals.

Government hospitals

These may be Central or State Government hospitals. Medical and surgical expertise is available at district hospitals each of which serves about 200,000 population. Trained nurses are employed in district hospitals. A primary health centre which is also referred

to as a rural hospital serves 100,000 population. One medical practitioner is available at each primary health centre. At the village level a sub-centre or a rural dispensary serves 10,000 population. It should be noted that there is no medical officer in a sub-centre. Auxiliary nurse midwives and health visitors are employed in primary health centres and sub-centres.

Privately owned hospitals

These are mainly nursing homes owned by medical practitioners in private practice. Both in-patients and out-patients are treated. Untrained women are hired as nurses and hospitalization is usually expensive.

Mission hospitals

These are mainly Christian hospitals under the Christian Medical Association of India (hereafter referred to as CMAI), which is the largest association comprising all Christian hospitals. These are usually known as charitable hospitals as poor patients are treated free. Concessions on bills are available for those who deserve it; and those who can afford to pay are charged the full cost of their hospitalization. Many people prefer to go to a Christian mission hospital because the quality of health care is considered to be superior. Medical and surgical expertise is available. Only trained nurses are employed in these hospitals. There are very few Hindu mission hospitals, known as Ramkrishna mission hospitals.

NURSING IN INDIA

There is very little information available about nursing in India prior to the 15th century. The term 'nurse' did not appear in the records of early civilisation. Nurses were called 'sevikas' (those who serve or attend), and to this day the general nurse is referred to by this name. The term 'dais', which means midwives, refers to unqualified midwives.

Development of the Nursing Profession

During the period of British Government, nurses were brought from England to start schools of nursing in India. Military nursing was the earliest type of nursing started in Madras in 1664. Later, a civilian hospital and Lying-in-Hospital were built in 1777. Nursing was carried out by male orderlies and was of poor quality. In the year 1878, the Government invited the Sisters of the Community of All Saints to come from England and take over the work of nursing in Bombay. It was recorded that their work was appreciated and the need for training nurses was felt (A New Text-Book for Nurses in India, 1978).

The progress of nursing in India was hindered by many difficulties, such as the low status of women, the 'purdah' system among Muslim women (a veil which covers the head and face so that the women are not seen by men). Other hindrances include the caste system among Hindu women ('jati', a community that has a similar occupation), illiteracy, poverty, political unrest, language differences; and the fact that nursing was looked upon as a servant's work. Prejudices among parents hindered them sending their daughters for nurse training as it was considered to be an inferior and indecent

profession. Religion prevented Hindu and Muslim girls from joining at all, so only Anglo-Indian girls and Christian girls could enter nursing. Since the time of the independence of India and the setting up of the new constitution (1947), giving women equal political, economic and educational rights, large numbers of young women have come forward to enter the nursing profession.

As the training for nurses and midwives progressed the need for registration was acknowledged in order to ensure professional standards. Madras State formed the first Registration Council in 1926. The Indian Nursing Council Act was introduced in the Constitutent Assembly of India in November, 1947. It was passed and came into force on the 31st December, 1947. It is required for nurses to register with their State Registration Councils. The purposes of the Council are:

- to co-ordinate the activities of the various state registration councils
- to set up standards for nursing education and to make sure that these standards are maintained
- to suggest curricula
- to inspect schools and examinations
- to grant recognition or take away recognition from any institution that does not meet its requirements.

According to the Handbook of the Trained Nurses Association of India (1980, pp 10 and 95), professional organisations like the Trained Nurses Association of India and the Nurses League of the Christian Medical Association of India were formed to uphold the standards of the nursing profession. With these changes many young, educated women started entering the nursing profession. Nursing is

developing as a respectable profession, striving to develop its body of knowledge.

The health care system in India exists to contribute to the health needs of people. Health is considered more than a basic human rightand as such it has become a matter of public concern, national priority and political action.

According to Samuel (1983) nursing is fast changing to meet the changing health needs of the society. The emphasis is on health and its promotion. The expanding role of the nurse demands specialised knowledge in order to give comprehensive nursing care to the individuals, families and community at large.

Nursing education

It was recorded in history that there was no formal training for nurses in the early developmental stages and apprenticeship was the practice. Later on, very brief training was given - two to six months of closely supervised practical experience in general nursing, called sick nursing - and certificates were given by the hospitals. According to A New Text-Book For Nurses In India (1978), the Government sanctioned a training school for midwives in 1854. It was apparent that midwifery training was given first followed by general nursing training. In 1871, this sequence was reversed and general training was given first followed by a course in midwifery and then the length of training was increased to a period of three years.

Mission hospitals were the first to begin the training of Indians as nurses. Initially there was no uniformity of courses or educational requirements for entry. About 1907-1910, the North India United Board of Examiners for Mission hospitals was organised and set

up rules for admission and standards of training, and conducted a public examination. A few years later, the Mid-India and the South India Boards of nurse examiners were similarly set up. There are Examining boards of the Nurses League of the Christian Medical Association of India. The South India Board of examiners is now known as the Board of Nursing Education, South India. The general nursing and the midwifery programme includes all areas of nursing as well as integrated community health nursing.

The other type of nursing programme is a two-year auxiliary nursing and midwifery course. This course prepares the nurses to practise elementary nursing and midwifery and also gives health teaching to the public.

Drawing from the history it could be noted that the first four-year basic Bachelor degree programmes were started in 1946 at the Colleges of Nursing in Delhi and Vellore. Community health nursing was integrated in the course. As the courses were established, the nurse leaders felt the need to have better qualified tutors and ward supervisors in order to maintain nursing standards. Hence post-certificate courses in Nursing Administration, Supervision and Teaching were first set up at the Colleges of Nursing New Delhi and Vellore, and the Government General Hospital, Madras. Later on similar courses were started in several other places. These courses gave an opportunity to some Indian nurses to prepare themselves for responsible positions in hospitals and schools of nursing.

According to A New Text Book for Nurses in India (1978), a post-certificate course in Community Nursing has been offered by the All India Institute of Hygiene and Public Health in Calcutta, since 1953. In 1960, a similar course was set up by the Lady Reading

Health School in Delhi. In 1963, the School of Nursing in Trivendrum instituted the first two-year post-certificate Bachelor Degree programme, and other schools have started since then. The first Master's Degree course, or two-year postgraduate programme, was begun in 1960 at the College of Nursing in Delhi, followed by other colleges. It is evident from the history that nursing education is fast changing; many educated women are entering nursing and are able to obtain Bachelor and Master degrees and also specialised training in other fields. The syllabi prescribed by the Indian Nursing Council (1978) (see Appendix 1a) indicate that medical and social sciences and also advanced nursing are taught in the courses.

The Handbook of the Trained Nurses Association of India (1980, pp 116 and 121) states that, there are now 277 Schools of Nursing, 21 Health Visitors' Schools, 329 Schools for Auxiliary Nurse Midwives, 15 Colleges of Nursing and 4 postgraduate Colleges of Nursing in the country. According to CMC (77, p. 364), the annual output is 5,700 nurses, 600 health visitors, and 5,400 auxiliary nurse-midwives.

It is also evident from the history that one of the handicaps in the development of nursing schools was a lack of text-books. Many American and British text-books are being used with adaptations in order to meet the health and nursing needs of the country. It is apparent that there is a need for text-books to be written by Indian nurses. A beginning has been made in this work; the South India Examining Board of the Nurses League of the CMAI first published a text-book in 1961; titled A New Text-Book For Nurses In India. A text-book for auxiliary nurse-midwives was published in 1967 and also several manuals relating to the basic sciences and nursing have been published by other professional nursing bodies.

Nursing practice

From reviewing history it is apparent that nursing has undergone many changes in India; especially nursing education. Despite the striking changes in nursing education, nursing practice still remains in its ritualistic, traditional and task-orientated manner.

According to Samuel (1983), technological advances such as renal dialysis, transplant care and intensive care resulted in expanding the role of the nurse, and seem to demand a scientific approach in nursing. The trend in health care delivery system in India is to provide comprehensive health care to people, families and the community at large. In order to give comprehensive health care (otherwise referred to as total care, or holistic care), it would seem to be more appropriate for nursing practice to be within the scientific framework which appreciates the multi-dimensional aspects of the individual. Rogers (1970) states that:

> "Nursing's central concern is with man and his entirety. ... Human behaviour reflects the merging of physical, biological, psychological and spiritual attributes into an indivisible whole - a whole in which the parts are not distinguishable." (p. 41)

A scientific approach in nursing is a systematic problem-solving approach where the individual's problems are identified, and nursing care is planned, implemented and evaluated.

Kratz (1982) defines nursing process as:

> "a problem-solving approach to nursing that involves interaction with the patient, making decisions and carrying out actions based on an assessment of an individual patient's situation. It is followed by an evaluation of the effectiveness of our actions." (p. 3)

Apparently, changes are also taking place in nursing practice even though it retained its traditional and ritualistic manner for half a century. There seems to be a growing interest among nurse

educators in the problem-solving approach in nursing. It is worth noting that according to the Christian Nurse (1984) a workshop was held on 'holistic care' at the Graduate School of Nursing, Indore, which incorporated the principles of systematic nursing. The term systematic nursing seems to appear increasingly in nursing literature in India.

CMAI hospitals were the first to teach principles of patient-centred approaches in the early 1970's. Patient care assignments were also introduced in some hospitals. According to Samuel (1983), nurse leaders in India seem to realise the value of incorporating theory and practice, and plans are under way to teach systematic nursing in both basic and postgraduate courses. Although an attempt has been made to teach systematic nursing within the schools, it has not been implemented in any hospital to date. Systematic nursing is a means to improve nursing standards and patient care. What is now required is inquiry and research in order to introduce systematic nursing within the clinical area and describe that change process and its outcomes.

Nursing research

Nursing education in India is not research oriented; there is no provision for research training at all. It is heartening to learn that plans are under way to start research training for nurses. An introduction to research is being introduced to fulfil the educational requirement for a master's degree. However, there are about five Indian nurses who obtained doctoral degrees from the USA.

The nurse leaders in India seem to recognise the need for research in nursing. In October 1982 A National Research Conference

was sponsored for the first time in India by the Teachers' Association of Bangalore College of Nursing. The following recommendations were reported.

- Each College of Nursing should have a research cell.
- The job description of the faculty needs to be studied to provide time for conducting research.
- Colleges of Nursing should foster a research awareness among the nursing students. Colleges of Nursing should encourage the appropriate climate for academic and scholastic activities.
- Central and State Governments and private organisations should include nursing research in their budget.
- Opportunities should be provided for (Indian) faculty to visit foreign countries on a short-term basis to learn about nursing research.
- Efforts should be made to co-ordinate the research and scholastic activities with the Colleges of Nursing in other countries. (The Nursing Journal of India, 1983)

OBJECTIVES OF THE STUDY

It is apparent from history that nursing practice in India is mainly ritualistic, traditional and task-orientated. The need for a change in nursing practice can be identified from the background to the study described in this chapter. Therefore it seemed essential to introduce systematic nursing, which was believed to be based on sound scientific principles, in order to give individualised and comprehensive nursing care, which is the primary objective of the health care system in India.

The following are the central objectives for the study:

1. to describe the existing system of nursing practice in the hospitals selected for the study
2. to describe the extent to which patient allocation is practised
3. to describe the process of change in the implementation of systematic nursing
4. to describe the educational and administrative process in introducing systematic nursing
5. to describe the outcome of change.

The purposes of this project are to introduce systematic nursing in medical and surgical wards of selected hospitals in India and to chronicle that change.

SIGNIFICANCE OF THE STUDY

Systematic nursing is viewed as a scientific framework for developing individualised nursing care based on patients' problems. These problems may be physiological, psychological, social, cultural and/or spiritual. It is believed that patients' problems can be identified through the use of a problem-solving approach. 'Implementing systematic nursing in two hospitals in India may give the nurses a greater insight into patients' problems which could reflect the multidimensional qualities of individuals.

The process of nursing is a process of problem-solving in a rational and scientific manner. The expanding role of nurses in India in meeting the individual and community health needs at large, demands a systematic, problem-solving approach towards nursing. A scientific approach and systematic assessment of patients' problems,

and planning, implementing and evaluating the outcome of care, would contribute to the body of knowledge about nursing.

The use of systematic nursing as a means of bridging the gap between nursing theory and practice is of crucial importance to improve nursing standards. One of the important aspects of systematic nursing is applying theory to practice. Therefore, it is hoped that this study would bridge the gap between nursing theory and practice.

Systematic nursing is concerned with individualised patient care. It is vital and necessary in any organisation to determine who does what, and who is responsible to whom. This study may contribute to the better organisation of ward work and patient care by means of allocation of patients to individual nurses, their responsibilities, accountability and documentation for which nurses are responsible to the ward sisters.

The nurse as a health-care planner and provider has a greater role to play in delivering individualised care to patients. Educating patients' families about their health needs and involving them in planning and participating in care may increase their awareness of their health needs.

The nurse-patient interaction is an important aspect in systematic nursing. A series of actions are involved in it. In systematic nursing the nurse and patient interact in identifying patients' problems, setting goals for care, planning, implementing and evaluating the outcome of care. Communication is the medium for establishing nurse-patient interaction. In the process of communication, the nurse-patient interaction increases and this leads to better understanding of patient's problems. It is believed that the introduction

of systematic nursing would result in increased satisfaction to patients with the care they received and also greater job satisfaction to nurses.

Since nurse educators in India are planning to teach systematic nursing, it is hoped that the implementation of this method in two hospitals will motivate other health care systems to adopt this new approach in nursing.

CHAPTER 2

THEORETICAL FRAMEWORK

INTRODUCTION

The role of theory as described by Abdellah and Levine (1965), is to summarise existing knowledge, to provide an explanation for facts observed and their relationships and also to predict and explore events which are not yet observed and their relationships. Theory assists the research process in several ways. It can highlight the research avenues to pursue, thereby assisting in formulation of a research problem, and it can enrich research by pointing to the way in which findings of a scientific study contribute to the body of knowledge. Therefore, it is essential for a researcher to have an understanding of theoretical foundations that guide the research.

Nurses rarely practice their profession in isolation; nursing is a person-oriented profession within the health care system. Changes are inevitable in any social system and the health care system is not an exception. It is the organisational structure which either supports or interferes with changes in nursing practice. Systems theory and change theory were chosen for explaining this study. Systems theory provides a framework for the health care system and the change process is analysed within the model of planned change. Nursing theories are also discussed in this chapter.

SYSTEMS THEORY

Systems theory has received considerable attention in the social sciences as a means of exploring social change. According to Yura and Walsh (1978) general systems theory was first introduced in 1937 by Ludwig von Bertalanffy. They further discussed its application to the health care system, especially to systematic nursing; pointing a way to introduce change in nursing practice. A number of other

authors, for example Altschul (1977), Bennis et al (1976) and Lancaster and Lancaster (1982), agreed on the use of a systems approach as a means to understand change. Grypdonck et al (1979), King (1973) and Towell (1979) used a systems approach to introduce change in nursing care. Systems theory has a direct application to the present study.

Lancaster and Lancaster (1982) define a system as an

> "assemblage of objects, parts or pieces that are organised or united in some way to form a whole." (p. 452)

The definition explains that a system encompasses a complete organisation rather than one part in relationships. Pembrey (1978) states:

> "A system is a set of interrelated parts, each of which is related to every other part. Both the hospital itself and the wards within it can be regarded as open systems which are interrelated and react upon each other, as well as in relation to the wider health care system of which the hospital is a part." (p. 5)

An open system is one that freely exchanges information, energy and matter. The idea of an open system stems from the biological perspective. An organisation is an open system, in which continuous exchange of information, energy and matter takes place for its survival. According to Lancaster and Lancaster (1982) an important characteristic of a system is the boundary or the area that separates the system from the environment. The boundary regulates the exchange of energy and information between the system and its environment. Though the boundary separates the system, one system is connected to the other through interfaces or linkages. Open systems do not maintain a static position; they constantly interact with each other, hence tension and stress arise. The task of a change agent is to identify these early in the change process and find a way to deal

with such tensions and stresses between the individuals or groups within the organisation. Goodenough (1963) states:

> "Change in any part of a stable system sets in motion a series of compensatory adjustments in its other parts and in their mutual arrangements until a new equilibrium is reached." (p. 322)

This has application to the health care system as well as to the individual's personal system. The environment of the health care system includes patient, nurse, doctor and all other members of the health care system. Where there is exchange of input and output feedback takes place. This discussion leads to consideration of specific aspects of the health care system in relation to a systems approach.

Yura and Walsh (1978) consider society or environment as a supra-system which consists of a number of other systems, such as educational, industrial and health care systems. All of these systems are interdependent and interrelated. A health care system comprises many other interacting subsystems like medicine, nursing and dentistry. All of these systems operate in an integrated and co-operative manner and contribute to the effective functioning of the health care system thus fulfilling its purpose. Society or the suprasystem provides input for the health care systems. Through the process of functioning output is produced and fed back into the society. The society accepts or rejects the output depending on the contribution of the system to the fulfilment of its purpose. These ideas are presented in a diagrammatic form (see Figure 2.1).

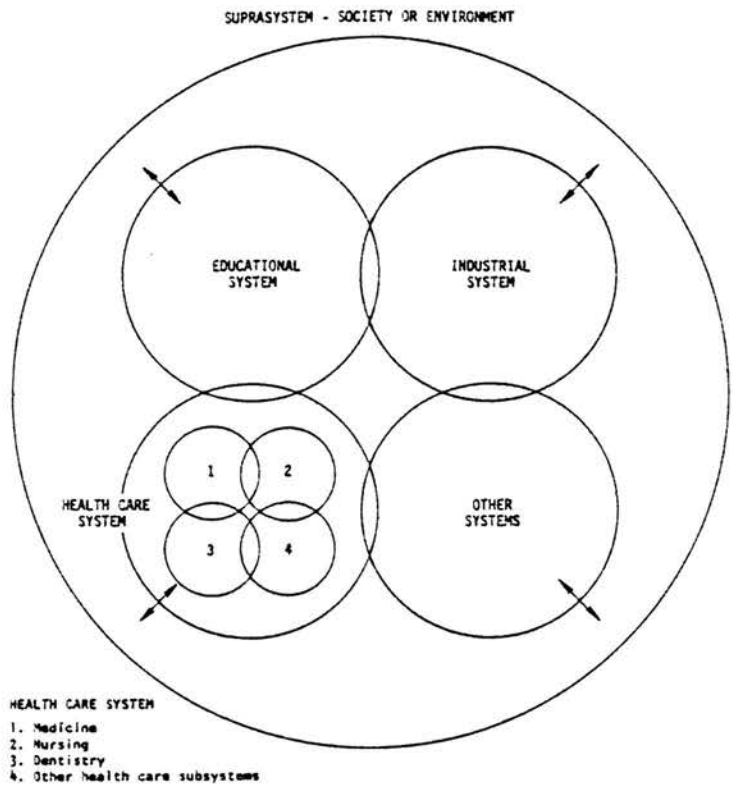

Figure 2:1 Suprasystem - Society or Environment

Reproduced by permission from Yura, H. and Walsh, M. (1978) The Nursing Process, The Appleton-Century-Crofts, New York, p. 45.

The health care system in this study refers to a hospital, which is a highly integrated system existing to help people attain the optimum level of health. Changes are being introduced to meet the societal demands as well as to fulfil the purpose of the system. The purpose of the health care system in India is to provide comprehensive health care to the society. To effect change in any system it is necessary to understand its structure and function. The structure refers to the unique arrangements of its parts; for example, in a health care system this could refer to people and their roles, policies, procedures and techniques. The function refers to the

operationalisation of the system; which is the process of ongoing interactions among all the subsystems with an aim of achieving its purpose. The concept of a systems approach has been explored in relation to organisational and individual structure and functions.

Organisational Structure and Functioning

An attempt to understand significant health care issues is a complex process and knowledge of the organisational structure and function is required. In particular a knowledge of the administrative structure and hierarchical authority system, policies, staffing patterns, division of work, communication system and interaction between management, staff and patients, is essential. In addition other aspects must be taken into account including procedures, technology, the health care delivery and social and psychological experiences of patients and other issues arising in relation to aspects of health care. Towell's (1979) study using a social systems approach to research and change in nursing care, employed action research strategies. The research was carried out in a collaborative relationship with practitioners; with the intention of contributing to the solution of practical problems and increasing understanding of the issues being studied. These factors led the researcher in the present study to design appropriate methods and adapt action research roles influenced by theoretical understanding. In a complex health care system, a systems view provides a comprehensive approach and acknowledges the complexity involved in looking at the system's continuous interactions in relation to change. Such a view avoids fragmentation, by recognising that individuals function as wholes in the system.

Implementing systematic nursing is viewed as a change in the nursing system. A systems approach facilitates open communication, inter-personal and inter-professional relationships and exchange of information; thus helping to plan and introduce change in co-operation with the nurse administrators, educators and other nursing staff. A change whether major or minor in one part of the system or a subsystem can produce ripple effects on other systems in the hospital such as medicine. Lancaster and Lancaster (1982) contend that resistance to change can be minimised by keeping people in all parts of the system informed.

Systems Theory and Individual Systems

Systems theory when applied to people means that every individual is viewed as a living system. Yura and Walsh (1978) state:

> "The nurse and the client can each be studied as a person." (p. 46)

With further analysis one could see each individual as a composite of biological, psychosocial and spiritual systems within the individual system; each having its own purpose. The systems are interrelated and interdependent, so that the individual functions as a whole rather than as any one part of the system.

Yura and Walsh (1978) also view the nurse and the patient together as an interacting and dynamic system. Each of them can be considered as open systems. As a result of interaction with the patient and the information obtained, nursing care is influenced. Evaluation of the care provides feedback to the system.

Drawing from a systems approach, the individual's biological system can be explained in the following way. Within the biological

system, there are a number of systems or subsystems, such as the skeletal, muscular, circulatory and nervous systems, and these are interrelated and interdependent. For example, an arm is an individual organ consisting of bones to which muscles are attached; supplied with blood vessels and nerves and covered with skin. Together, as one organ they perform the function of movement or mobility.

The other way of looking at a systems approach is in understanding the interrelatedness of patients' problems. An example given here helps to explain the concept. A patient was bed-ridden, as he sustained a fractured neck of femur which resulted in physical immobility. This in turn affected the patient's psychological system; because clinically depressed, he refused to have any visitors and blamed god for allowing such a thing to happen. Although it was the patient's physiological system that was basically affected, a systems approach helps the nurse to understand the interrelatedness of his psychosocial and spiritual problems, which provides a holistic view.

> "As a synthetic approach, systems theory postulates that the 'whole is greater than the sum of parts'." (Lancaster and Lancaster, 1982, p. 38)

The discussion on systems theory involves consideration of planned change because change in any one part of the system either organisational or individual affects the other.

Nursing Theories

Though theories used by nurses are borrowed from other disciplines, nursing theoretical development is, however, rapidly advancing. Rogers' (1970) theory of life process in nursing and Bower's (1977) holistic theory of nursing make use of a systems

approach. These theories have a practical application to the present study and are described here. Rogers' (1970) theory of nursing is used in a number of ways in this study. To avoid any confusion between a theory and a conceptual model, these are first defined.

According to Fawcett (1984):

> "Nursing theories may be characterised as sets of concepts, definitions and propositions that address the metaparadigm phenomena of person, environment, health and nursing by specifying relationships among variables derived from these phenomena." (p. 22)

A nursing theory which identifies underlying assumptions is important in developing a body of knowledge.

Fawcett (1984) states:

> "Conceptual models are made up of concepts which are words describing mental images of phenomena and propositions which are statements expressing the relations between concepts." (p. 2)

It can be further explained that a conceptual model is a highly abstract system of global concepts and linking statements whereas a theory deals with one or more specific concepts. A conceptual model has to be further specified by a theory.

Rogers' (1970) theory of nursing is based on man in his entirety or the process of life. The central concern of nursing is the individual as a whole, or a total person. She believes that the human existence is a unified phenomenon and the person's behaviour reflects the interrelatedness of physical, biological, psychological, social, cultural and spiritual attributes. These attributes are in a person who is a whole and indivisible. Rogers (1970) has taken a systems approach in identifying the attributes of the wholeness of a person as an individual. She further states:

> "The unity of man is a reality. Man interacts with his environment in his totality." (p. 44)

While explaining the unity of man or an individual Rogers (1970) contends that the cells and the organs have their own function in the body but this functioning alone does not make them human beings; neither can the mind be separated and exist on its own. This interrelatedness reflects the dynamic nature of the life process. Viewing the person as an open system, Rogers (1970) has made the following assumptions. The first assumption is:

> "Man is a unified whole possessing his own integrity and manifesting characteristics that are more than and different from the sum of his parts." (p. 47)

This assumption explains the totality of the individual, as biological and psychosocial systems which are interrelated, and enables the nurse to gain a holistic view of a person.

The second assumption states:

> "Man and environment are continuously exchanging matter and energy with one another." (p. 54)

As was discussed earlier in connection with systems theory this refers to the characteristics of an open system. In the context of the present study, this refers to the process of exchange of matter within the biological system of a person in relation to the activities of daily living, and also to the psychosocial systems. This can also be applied to the individual systems of the patient and the nurse and the process of nursing. Input, transformation, output and feedback take place between the patient and the nurse, helping the nurse to plan individualised nursing care to help solve the problems of the patient.

The third assumption is:

> "The life process evolves irreversibly and unidirectionally along the space-time continuum." (p. 59)

This suggests that though the advancement of scientific knowledge contributes extensively to a healthful living, the life process seems to remain irreversible. Conception and death are facts of the life process however long or short the individual's life span may be. In spite of all the technological and scientific advances, the need to perform the activities of daily living is still of the primary importance on the continuum of the life span. This assumption helps the nurse to assess and identify the health and illness problems of the individual in order to plan nursing care.

The fourth assumption states:

> "Pattern and organisation identify man and reflect his innovative wholeness." (p. 65)

Innovation is an inherent quality of man. Innovation does not necessarily mean a scientific discovery or a change in the environment. It can also refer to the changes that take place within the individual's knowledge, understanding, attitudes and ability to demonstrate the change in the external environment. Health needs of people are changing. Changes are occurring in both nurse education and practice to meet the changing demands of the health care system as well as the individual expectations of patients or clients.

The fifth assumption is:

> "Man is characterized by the capacity for abstraction and imagery, language and thought, sensation and emotion." (p. 73)

This refers to the ability of the individual to understand his own self and his environment, and to express himself. The person's experiences in his or her environment differ. These may be happy and pleasant as well as unhappy and hurtful experiences. The person has freedom to choose his practices and fulfill his desires. Sometimes

these may be detrimental to health and well-being, for example alcoholism. The understanding of this aspect of the person helps the nurse to view the person as an individual and a total being and also his ability to understand his environment that contributes to healthful living. This in turn enables the nurse to plan care with the patient or the client.

From these assumptions five concepts of nursing are derived: (1) wholeness; (2) openness; (3) pattern and organisation; (4) unidirectionality; (5) sentience and thought. Rogers (1970) presented a philosophical view of a person that allows the appreciation of the wholeness or totality of an individual. This understanding enables the nurse to gain a holistic view of patients' physiological, psychological, social and spiritual aspects, their inter-relatedness and the problems that arise from these aspects. This in turn guides the nurse to plan and give comprehensive nursing care to patients. In all this process, Rogers (1970) believes that the focus of nursing is the person as an individual.

Bower (1977) views the person as an individual, unique and whole. All the parts are interrelated and function collaboratively. While discussing body-mind relationships Bower (1977) states:

> "Mind and body are not separate entities, nor does the mind consist of independent faculties or elements separate from body organs and processes. What happens in one part affects the whole." (p. 34)

According to Bower (1977) wholeness means completeness; and the individual functions as an integrated whole. The person performs the activities of daily living with interest, enjoyment and satisfaction, and copes with stresses constructively. Health problems arise when there is an imbalance in the physiological functioning or from

psychological stresses or from the environmental factors. Whatever the cause may be it affects the whole of the individual. The individual's illness affects the family and also the society at large. Therefore, Bower (1977) suggests that the individual as well as the family must be included in planning care. The same approach can be applied to the society, for example, if an individual is suffering from a communicable disease like leprosy, this may affect the family as well as the community. Therefore, while planning nursing care, it is important to consider the preventive aspect of health care. This has relevance to the objective of the health care system in India, that is, to provide comprehensive health care to all people in India.

Nursing theories guide the study toward a scientific and systematic and problem-solving approach, which helps the nurses gain a holistic view into patients' problems. The concept of individualised nursing care and total care can be further clarified by considering the individual's physiological, psychological, social and spiritual attributes and their interrelatedness. Through the use of a systematic approach, the individual's problems can be identified, and care planned, implemented and evaluated.

CHANGE THEORY

The origin of change theory is credited to Lewin (1952) who first described the planned change process. This was further developed by Rogers (1983) and Lippitt (1973) who set forth the foundation for planned change. In the literature, 'change' and 'systems' are linked together as change does not take place in isolation but within a system whether it is a biological, an individual or a social system.

Therefore, change can be viewed only through systems. The purpose of the present study is to bring about a change in nursing practice. Lippitt's (1973) planned change theory embodies action research strategies and provides a theoretical base to plan an action research method for this study. Therefore, this section aims at exploring the theoretical issues of planned change.

Mauksch and Miller (1981) define change as:

> "the process by which alterations occur in the function and structure of the society." (p. 9)

This definition implies that change is associated with alterations of conditions or circumstances; and change in an organisational system always involves people.

In explaining innovation Rogers (1983) states:

> "An innovation is an idea, practice, or object that is perceived as new by an individual or other unit of adoption." (p. 11)

It could be argued that if the idea seems new to the individual, a group or a system, that is innovation. Newness does not necessarily mean only new knowledge but also the attitude towards it, either acceptance or rejection.

The notion of planned change has been described in various ways by various writers. For example Bennis et al (1970) summarise Lippitt's view of planned change thus:

> "a conscious, deliberate and collaborative effort to improve the operations of a human system, whether it be a self-system, social system, or cultural system; through the utilization of scientific knowledge." (p.4)

and according to Lippitt (1973) planned change is:

> "an intended, designed or purposive attempt by an individual, group, organisation or larger social system to influence directly the status quo of itself, another organism or a situation." (p. 37)

From these definitions the main features of planned change appear to be that it is purposive, deliberate, conscious and collaborative. It is also viewed as an integration of theory and practice in order to develop strategies necessary for the implementation of new programmes.

Lewin (1952) identified three steps for the planned change process: 1) unfreezing; 2) moving to the new level and 3) freezing:

1. Unfreezing refers to creating a need to change
2. Moving to the new level refers to making the participating system recognise the need to alter the status quo and agree on an action plan
3. Freezing refers to adoption of change.

Rogers (1983) expanded Lewin's three steps and described the planned change in six stages. A brief description of these is given here.

1. Recognising a problem or need is the first step where the innovation-development process begins
2. Basic and applied research refers to a design for action or instrumental action
3. Development is the process of putting a new idea in a form to meet the needs of the system
4. Commercialization refers to the practice of innovation or new solution
5. Diffusion and adoption is concerned with spreading the innovation into a system and its implementation
6. Consequences is the last step and deals with the outcome of the innovation whether or not it resolved the problem.

Lippitt (1973) explicitly described the strategies for planned change and identified seven phases in the change process. These are discussed here as stages.

Stage 1: Diagnosing the problem The first stage of the change process deals with diagnosing the existing problem in the system. Lippitt (1973) suggests that the problem should be identified along with the participants of the system to be changed; the more they are involved, the more accurately the problem can be identified. It is also essential to involve people with considerable power and authority in the organisation from the early stages of change process. This stage corresponds to phase one and two of the action research method developed for this study.

Stage 2: Assessment of the motivation and capacity for change The undertaking of a change project is a hard task and involves commitment of the change agents and also the system to be changed. Therefore, it is essential to assess such factors as organisational structure, people, policies and resources as discussed earlier in relation to systems theory. It is helpful to understand the peoples' views about change; whether they are supportive and whether the institution can afford to be involved, and the availability and limitations of financial resources and also the people to be involved in the project. According to Mauksch and Miller (1981) these can be referred to as conditions influencing prediction of change. This stage is incorporated in the second phase of the research method.

Stage 3: Assessment of the change agent's motivation and resources

This stage is concerned with the honest and critical self assessment of the change agent. The degree to which he or she is trusted and respected within the organisation influences the acceptance of the idea of change. The value of the change depends on the degree to which it fulfills its purpose. If the change agent's ideas are viewed as radical then it is unlikely that the change be supported. It is also important that the change be supported. It is also important that those who are responsible for introducing change have similar goals, objectives and styles of leadership, so that all those who are involved receive similar information about the project. This is also related to the second phase of the method.

Stage 4: Selecting progressive change objectives Once the diagnosis of the problem has been made, the system to be changed, the resources and constraints have been assessed. Then, step by step, strategy has to be developed for implementing the change. Specific plans have to be made, for example, deciding on who does what, when and how; and setting the time schedule is especially helpful. If a trial period is involved, critical evaluation is necessary to determine the effectiveness of different testing tools and procedures used. Amendments can be made in the plans before these are finally implemented. This stage was incorporated in phases three and four of the method.

Stage 5: Choosing the appropriate change agent's role The roles of the change agent and participants have to be clearly

defined. It is important for the change agent to choose an appropriate role; a consultant, a co-ordinator, a role model, a resource person or a teacher. Similarly, the roles of the participants also have to be decided. Some may be internal change agents, group leaders, monitors or practical workers. This clarity removes the uncertainty and facilitates effective change. This aspect has been related to phases three and four of the method.

Stage 6: Maintenance of the change The chief function of the change agent during this phase is to stabilise the change that is already established. This includes providing information about the consequences of change to all parts of the system. Reinforcing the change objectives and frequent reports about the change to supervisory personnel as well as to participants is helpful in motivating them to continue with the change implemented. Open communication is of value to clear any doubts and prevent the system going back to the old methods. Members of the original group may serve as resource persons to other units, and plans can be made for diffusion of information. This is noted in phase five.

Stage 7: Termination of the helping relationships As the prescribed plan is followed and change implemented, the change agent has to increase the responsibility of the participants; the system is expected to gain autonomy to manage the change. The change agent gradually withdraws from the change system. Lippitt et al (1958) refer to it as achieving a terminal relationship rather than termination, since

the change agent may continue to serve as a consultant or a resource person. This is discussed in phase five of the method.

The relationship between Lippitt's stages of planned change and study phases is shown in a diagrammatic form.

Lippitt's Stages	Study Phases
Stage 1 Diagnosing the problem	Phase 1 Initial survey of the environment Phase 2 Assessment of the change environment
Stage 2 Assessment of the motivation and capacity of change	Phase 2 Assessment of the change environment
Stage 3 Assessment of the change agent's motivation and resources	Phase 2 Assessment of the change environment
Stage 4 Selecting progressive change objectives	Phase 3 Preparations for the study Phase 4 Setting change objectives
Stage 5 Choosing the appropriate change agent's role	Phase 3 Preparations for the study Phase 4 Setting change objectives
Stage 6 Maintenance of the change	Phase 5 Stabilising change
Stage 7 Termination of the helping relationships	Phase 5 Stabilising change

Figure 2:2 Lippitt's stages of planned change and study phases

Lippitt's (1973) planned change theory adopts the problem-solving approach and provides an explanation for the process of change and the role and relationships of the change agent, thus giving a direction for implementation of systematic nursing within the planned change model. Resistance to change can be minimised by planning the change with the client system, and also communicating plans to all the subsystems within the system. These concepts of the change agent's role and the client system are crucial to the present study.

The change agent and the client system work collaboratively to implement change, hence it is important to consider these factors here.

The Change Agent

The agent is one who generates ideas and initiates change by influencing the system to be changed, which can be referred to as client system. A change agent can be a person outside the system, or a professional, often known as an external change agent. If within the system, the individual may function as an internal change agent. Mauksch and Miller (1981) define the change agent as:

> "an individual who influences how, when and where alterations in a social system occur." (p. 5)

They also state that a change agent can be a person or a team. The definition implies that new ideas are often generated. A conducive environment is developed by the change agent in co-operation with the client system in order to introduce change. In this way the change agent overcomes resistance and encourages acceptance. The external change agent as an outsider is free from the organisational cliques and biases and can view the situation objectively. The change agent also helps the client system to help itself; this is one way that the external change agent can function in collaboration with the internal change agents.

Nurse as a Change Agent

Changes are inherent in nursing and many changes have taken place within the nursing structure and the education system. The very nature of nursing suggest that nurses have been change agents.

Lancaster and Lancaster (1982) Mauksch and Miller (1981) view nurses as change agents. They contend that nurses can initiate and participate in change and can serve as effective change agents.

Characteristics of a change agent

In order to be an effective change agent, it seems essential that one possess certain characteristics. According to Mauksch and Miller (1981), the change agent should firstly be one who is willing to take some risks. The change agent may be able to foresee the risks inherent within the organisation and decide whether it is worth taking the risks. There may be resistance on the part of the participants to change in their traditional practices, organisational policies and resources. However, no change can be accomplished without taking some risks.

The second characteristic is a commitment to the efficacy of the change. This is an important one as it facilitates the change process in a feasible way, if the value of it is assessed and made known to the client system before proposing a change. This in turn may result in better acceptance of the change.

Thirdly it is essential for the change agent to possess competence in three areas: 1) knowledge; 2) practice; and 3) interpersonal relationships and communication skills.

To introduce change in nursing practice it is especially important for the nurse change agent to possess knowledge of nursing that combines research findings and information from basic sciences. The change agent should also be competent in nursing practice and demonstrate inter-personal relationships and communication skills. These qualities contribute to the credibility of the change agent and

enable the client system to develop confidence and trust in the change agent.

Functions of the change agent The role of the change agent is of paramount importance in the process of change. Lancaster and Lancaster (1982) offer the following guidelines to the change agents to implement change. The change agent assists the client system to:

"1) - define the problem;

2) - list all possible alternatives and positive or negative consequences of each;

3) - determine the most suitable alternative at this time for this setting;

4) - organise any implementation plan;

5) - provide ongoing supervision, direction, and support; and

6) - work toward developing an evaluation format." (p. 21)

It is essential to adapt this approach in implementing systematic nursing. Besides these, Lippitt et al (1958) suggested five types of helping roles which are also known as change agents' strategies. Since these have relevance to the present study, they are discussed below.

(1) Mediating and stimulating new connections within the client system This seems to be important as the change agent is often an outsider to the system. In any established system the pattern of internal relationship is well established. Hence it is necessary for the change agent to make possible new connections within the client system, to recognise old connections and also establish new relationships with individuals and groups.

(2) Presenting expert knowledge on procedures Another helping role of the change agent is to function as an expert in matters of procedures. A procedure may vary from a single new technique to a major reorganisation of processes within the client system. The change agent presents knowledge from the previous experience beyond the knowledge of the client system.

(3) Providing strength from within By joining as an autonomous subpart, the change agent provides strength within the client system. The change agent supports new relationships and offers help to meet the special needs.

(4) Creating a special environment Change agents also create environments or situations conducive to learning. Improvement comes from the cumulation of different kinds of learning such as group individual learning sessions and practical sessions.

(5) Giving support during the process of change The change agent helps the client system to meet the challenges which he or she may have originated. This refers to the encouragement and support that is given to the client system and also dealing with doubts and hesitations. This in fact starts soon after establishing relationships with the client system. The change agent is available to help with problems involved in the process of change.

Suggesting these strategies, Lippitt et al (1958) contend that the success or failure of any project depends heavily upon the change agent and client relationships established very early in the change process.

SYSTEMS AND THE CHANGE PROCESS

Having explored the theoretical concepts of systems and change, it is necessary to examine the relationship between the change agent's system, the system to be changed, and the process of change. This is considered important since it has direct application to the present study. Lancaster and Lancaster (1982) examined the change process in a systems perspective. The function of the change agent is to pay careful attention to the connections or interfaces or linkages between systems. While examining the change agent and the client systems, it is also necessary to consider two sets of boundaries, tensions, stresses, inputs and outputs.

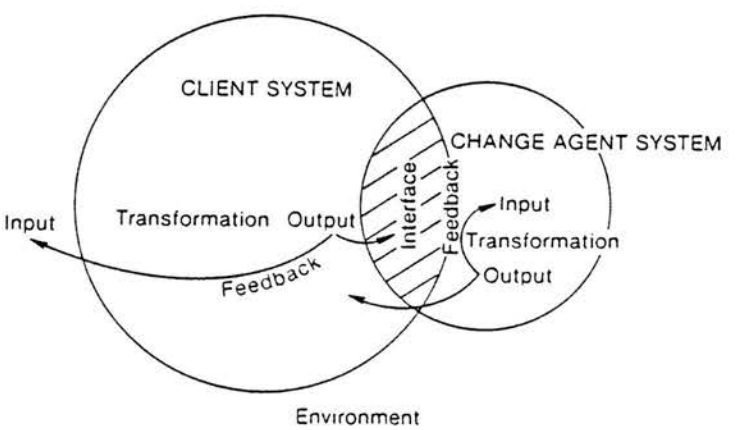

Figure 2:3 System Processing: Change Agent System and System to be Changed.

Reproduced by permission from Lancaster, Jeanette, (1982). Systems theory and the process of change. In Lancaster, Jeanette and Lancaster, Wade (Editor), Concepts for Advanced Nursing Practice: the Nurse as a Change Agent, The C.V. Mosby Company, St. Louis, p. 33.

Figure 2:3 depicts the relationship between the change agent and the client system being changed. The change agent system and the client system go through the process of input, transformation and output. The output of each system serves as input to the other

system and gives feedback. This process enables the researcher to examine the change. It is also essential for the change agent to be sensitive to the feedback on how the change activities are viewed, the ideas respected and the programme being accepted by the client system. Careful attention should be paid to the questions raised in the discussions as well as the areas being ignored by the client system.

With reference to Figure 2:3 the nursing system can be related to the client system, and the researcher to the change agent system. The change agent is an outsider to the system, effecting change. The two systems interact and go through the process of input, transmission and output, each affecting the other. The change agent introduces new ideas, implements change and evaluates the outcome, which gives feedback to the entire process.

The process of change within the health care system, specifically in nursing practice, is designed within Lippitt's (1973) planned change model. The role of the change agent is examined in relation to the concept of change in an organisational system in order to introduce change in nursing practice.

Each theory has its own role in the present study. Systems theory, nursing theory and change theory guide this study to introduce a change in nursing practice; that is, to change the nursing practice from the traditional task-oriented nursing to a scientific, systematic and problem-solving approach.

CHAPTER 3

LITERATURE REVIEW

INTRODUCTION

A review of literature on systematic nursing and nursing models is presented in this chapter. A variety of terms other than systematic nursing appear in the literature, terms such as nursing process, the process of nursing, individualised nursing, patient-centered nursing and the problem-solving approach. Although each of these terms is different, all embody the characteristics of systematic nursing. On the other hand, the term 'task allocation' is used to describe the traditional approach to nursing where tasks are allocated according to the position of the nurse in the ward hierarchy. Within the last two decades there has been an increased interest among nurses in adopting a more systematic and scientific approach in nursing. The term 'nursing process' has become an accepted part of the language of nursing among nurses of the western world.

Orlando (1961) is considered to be the earliest author to have used the term 'nursing process'. As a means of describing the interaction between the nurse and the patient (which includes the behaviour of the patient, the reaction of the nurse and the action designed for the care of the patient) Orlando used the term 'nursing process' (p 36).

According to Chambers Twentieth Century Dictionary (1974) the word 'process' means "a state of being in progress, a series of actions or events or a sequence of operations." The concept of process is not unique to nursing. In fact, it is used by many other disciplines; for example, teachers refer to the 'teaching process', and the 'management process' is basic to business studies. What

makes it special in this context is the addition of the term 'nursing'.

The origin of nursing process has been credited to the U.S.A., and many of the American authors, for example Marriner (1975), Yura and Walsh (1978) and Lewis (1978), widely used the term 'nursing process'. Abdellah et al (1960) preferred the phrase 'patient-centered approaches' to refer to individualised nursing care and nursing process. Authors such as Johnson and Davis (1978) and Walter et al (1976) used the phrases 'problem-solving nursing' and 'problem-oriented approaches' respectively. The process of problem-solving includes the fundamental series of steps by which a problem is identified and alleviated or eliminated, which is similar to nursing process.

During the past decade considerable interest has grown among British nurses in using nursing process in clinical practice. There has been an abundance of literature on nursing process in recent years. Although British authors used the phrase 'nursing process' in their early writings, there seems to be a preference now for a different terminology to describe nursing process. For example, Roper et al (1980) preferred the term 'the process of nursing' to 'nursing process'.

Long (1981) and the Open University publication (1984) used the terms 'systematic nursing' and 'systematic approach to nursing care' because the nursing process is a systematic way of organising nursing care. 'Process' alone does not suggest anything special without the word 'nursing'. Grypdonck (1980) on the other hand used 'systematic nursing intervention' because it emphasises what has to be done:

intervention is centered and proceeds in a more systematic way. Grypdonck argues that the term 'nursing process' does not contain this direct reference to the intervention.

The phrase 'systematic nursing' is chosen by this author. The use of this phrase refers to a method of organisation of work with a purpose, making use of mental faculties such as observation, thought and planning, which is a systematic approach. Although the underlying purpose is the same, the term 'nursing process' does not directly convey this meaning. This literature review focuses discussion on nursing process, otherwise referred to as 'systematic nursing' in the present study. In the review the term 'nursing process' is used in discussing the work of the authors who used this term; and 'systematic nursing' is used in discussing the work of the authors who used that term.

SYSTEMATIC NURSING

A number of authors, for example Yura and Walsh (1978), Little and Carnevali (1976), Lewis (1973), Clark (1978), Roper et al (1980) and McFarlane and Castledine (1982) seemed to believe that nursing process is a method of planning individualised patient care which involves observation, logical thinking and planning of care, giving of planned care to patients, and evaluation of outcomes. The first principle here is consideration of the patient as an individual and the second is that the kind of nursing care required is based on the individual's health problems or needs. The terms 'problems' and 'needs' are used interchangeably by many authors, but there is an obvious difference between the two. While clarifying the difference

between needs and problems, The Open University publication (1984) stated:

> "all people have needs such as the physiological need for food and psychological need for love. It is when people are unable to continue to meet their needs independently - in other words, when they are experiencing problems - that they require nursing assistance. The problems are the manifestation of the person's inability to continue to meet human needs." (p 51)

Systematic nursing is basically a problem-solving approach. Therefore, the term 'problem' is preferred to 'need' in this study.

Views of some authors on nursing process are discussed here. Yura and Walsh (1978) stated:

> "The nursing process is an orderly, systematic manner of determining the client's problems, making plans to solve them, initiating the plan or assigning others to implement it, and evaluating the extent to which the plan was effective in resolving the problems identified." (p 20)

The definition cited above conveys the meaning that nursing process is a scientific approach aiming to identify an individual patient's problems, plan nursing care to resolve problems, implement the planned care and evaluate the outcome of effectiveness of care. In order to do this nurses must use intellectual, interpersonal and technical skills. The four steps of nursing process identified by Yura and Walsh (1978) are: assessing; planning; implementing; and evaluating. Yura and Walsh have adopted a problem-solving approach.

A number of other authors have given similar definitions implying similar meaning. For example, Marriner (1975) stated:

> The nursing process is the application of scientific problem-solving to nursing care. It is used to identify patient's problems, to systematically plan and implement nursing care and to evaluate the results of that care." (p 1)

Marriner also identified four steps: assessment; planning; implementation; and evaluation - which are similar to those of Yura and Walsh (1978). Marriner on the other hand believed that nursing process can be used by nurses to help solve individual problems whether in a hospital, school, industry, outpatient clinic, public health department or neighbourhood.

Kratz (1982) also viewed nursing process as a problem-solving approach. According to Crow (1979) and Clark (1978) it is a method or a vehicle of clinical management to improve patient care. These authors and also Roper et al (1980) identified four steps: assessment; planning; implementation; and evaluation.

Other authors, such as Little and Carnevali (1976), Mayer (1978), Darcy (1980), and McFarlane and Castledine (1982), although agreeing on the underlying concept of nursing process, differed in identification of the phases.

Little and Carnevali (1976) viewed nursing process as a method involving a pattern of observation, logical thinking and decision making that forms the basis for the nursing care plan. They identified five steps: assessment; diagnosis; prescription; implementation; and evaluation.

Similarly, Mayers (1978) considered nursing process as a scientific approach to nursing and thus stated:

> "The technical, behavioural and intellectual skills of nursing practice are based upon theories and principles from the physical and social sciences." (p 4)

Mayers referred to technical skills as those skills which range from simple to complex and from supportive to restorative. These skills must be used with intelligence and a high degree of skill and

discrimination. Behavioural skills refer to skills that are needed for communication and interpersonal relationships. Intellectual skills refer to creative thinking, defining problems and deciding upon a course of action. The five steps identified according to Mayers are: gathering data; identifying problems; defining expected outcomes; prescribing best solutions; and evaluating at periodic and end-point intervals.

Darcy (1980) viewed nursing process as a scientific framework for planning nursing care. The scientific framework is the body of knowledge resulting from observation, testing and experimentation which is systematic, brought under rules and helps to develop a method for nursing practice. Assessment, diagnosis, nursing prescription, implementation and evaluation are the five steps identified by Darcy.

Little and Carnevali (1976) and Darcy (1980) considered the same steps of nursing process. The two authors agreed upon nursing process as a scientific method. Although Mayers (1978) agreed with the view that nursing process is a scientific approach, the steps identified are slightly different from those of Little and Carnevali and Darcy. There appears to be agreement about the first two steps, for example, 'assessment' and 'diagnosis' of Little and Carnevali;and Mayers' 'gathering data' and 'identifying problems'. Similarly, there appears to be agreement on the third step, 'prescription and defining expected outcomes'. However, Mayers (1978) did not seem to identify a step that directly corresponds to 'implementation', though perhaps 'prescription of best solution' (step 4) implies implementation. The step involving evaluation of the process is recognised by

all these authors. Similar to the steps of Little and Carnevali are those noted by McFarlane and Castledine (1982): data collection; assessment; planning; implementation; and evaluation. McFarlane and Castledine seem to prefer the term 'needs' to 'problems'.

The first two steps of Little and Carnevali's 'assessment' and 'diagnosis' and of Mayers, 'gathering data' and 'identifying problems', can be considered equivalent to the assessment phase of authors such as Yura and Walsh, and Roper et al who identified four phases.

Both Lewis (1973) and Bower (1977) held the view that nursing process is the key to individualised care that helps solve the physiological, psychological and spiritual problems which affect the individual's health as a whole. They both identified three phases in nursing process. According to Lewis these are: assessment; intervention; and evaluation. The planning phase is not specifically identified. Bower on the other hand put the planning and nursing action together, thus the three stages according to Bower are: assessment; formulation of plans or nursing action; and planning for evaluation. Although Bower referred to the second stage as 'formulation of plans or nursing actions' it can be argued that these two are not the same. One may plan a nursing action and may never implement it. Therefore, the importance of the implementation phase can not be overlooked. One stage of nursing process leads to the next.

Authors such as Johnson and Davis (1975) and Walter et al (1976) did not use the phrase 'nursing process' but strictly adhered to 'problem-solving approach'. Johnson and Davis listed eight steps for

problem solving in nursing: the situation; discovery of a problem; assessment; interpretation of data; identification of problem; deciding on a plan of action; action; and evaluation. The six steps for problem-solving according to Walter et al (1976) are: data collection; problem identification; goal setting; plan formulation; nursing action; and evaluative process.

As a critical analysis, the first five steps of Johnson and Davis: the situation; discovery of a problem; assessment; interpretation of data; and identification of problem, and the first three steps of Walter et al: data collection; problem identification; and goal setting, can be considered equivalent to the assessment phase in nursing process. They serve the same purpose as assessment, that is, identifying the patient's problems. Johnson and Davis' 'deciding on action' and the 'plan formulation' of Walter et al are the same as the steps of planning; and 'action' and 'nursing action' are equivalent to implementation. The evaluation phase is unchanged.

The above discussion highlights that the stages of nursing process are described in different ways by different authors, although the essence remains the same. The difference seems to arise in the stages associated with collecting information, defining the nursing problems and planning to resolve those problems. This may be because of the overlapping nature of the stages. A number of authors agreed on four phases: assessment; planning; implementation; and evaluation, as these are specifically identified and seem to be comprehensive. One phase leads to the next and it is a cyclical process. A four phase description of the nursing process is used in this study.

PHASES OF SYSTEMATIC NURSING

The four phases used in this study are assessment, planning, implementation and evaluation. These are described here.

Phase One - Assessment

Nursing assessment is a systematic process of collecting data focusing on the total person. The purpose of nursing assessment is to identify the patient's problems. The assessment process requires observation, interpersonal skills, knowledge from biological and social sciences, and information from other staff members and members of the patient's family.

The patient's physiological, psychological, social and spiritual problems are identified, analysed and interpreted.

Yura and Walsh (1978) stated:

> "Assessing is the act of reviewing a situation for the purpose of diagnosing the client's problems." (p 27)

Nursing assessment is a process of systematic seeking out of data in order to identify the patient's problems. It is noteworthy that authors such as Yura and Walsh (1978) and Bower (1977) used the term 'nursing diagnosis' interchangeably with identification of the patient's problems. Whether using the term 'nursing diagnosis' brings about a conflict with the term 'medical diagnosis' has to be carefully considered. Walter et al (1976) on the other hand argued that hesitation to use the term 'nursing diagnosis' is a comfortable game which denies the collegial equality of physicians and nurses.

The World Health Organisation's Nursing Process Work Book (1976) (hereafter referred to as W.H.O. Euro/Nurs/76.1) suggested the following steps for nursing assessment:

- collecting information about the person
- interpreting the collected data
- identifying the needs for care from the information gathered
- validating with the person the identified needs for care
- setting priorities for care.

According to The Open University publication (1984) assessment is a composite of three factors: collecting information (data); reviewing the data collected; and identifying the patient's problems from the data (p 28).

It is necessary to have a clear understanding of patients' problems before planning nursing care. It is important to take time for inquiry, and to determine the nature of a problem before attempting to solve or help solve it. To be of value assessment must be systematic. Some nurses use a nursing admission sheet, some a structured nursing history sheet and some a structured assessment form as tools for assessment of patients' problems. For example Johnson and Davis (1978) recommended a nursing admission sheet, and McFarlane and Castledine (1982) a nursing history format. Lewis (1973), Marriner (1975), Little and Carnevali (1976), and Roper et al (1980) recommended a structured assessment form.

The literature highlights the complementary use of nursing assessment tools, since they all aid in assessing patients' problems. A nursing history on its own does not serve the purpose and further assessment is needed although a history can be considered as part of nursing assessment. The Open University publication (1984) also used a structured assessment form. A 'nursing assessment form' seems to be an appropriate term to use. Roper et al (1980) suggested that

activities of living can be used as a framework for assessment in conjunction with biographical and health data.

Interviewing, and observing and measuring skills are necessary for assessment according to McFarlane and Castledine (1982) and the Open University publication (1984). Little and Carnaveli (1976) and Bower (1977) referred to these skills as 'subjective and objective assessment and planning'.

The need for the patient to express his or her feelings spontaneously was recognised by McFarlane and Castledine (1982). They suggested that this can be enhanced by providing privacy and minimising interruptions. Empathetic responses from the nurse interviewer facilitate openness and interaction between the nurse and the patient. This enables the nurse to clarify with the patient the data already collected. Observation skills play a part in interviewing to assess the patient's condition, emotional state and obvious physiological problems, such as difficulty in breathing. The patient is the primary source from which data are obtained. The Open University publication (1984) emphasised the importance of involving the patient's family, especially when the patient is a child or unconscious. Other members of the health care team can provide valuable information. Information can also be obtained from medical and laboratory records. Measurable data can be obtained by checking the patient's temperature, blood pressure, weight, and fluid intake and output.

As discussed earlier, although authors such as Roper et al (1980), Lewis (1973), Little and Carnevali (1976) and McFarlane and Castledine (1982) vary in identifying the stages of nursing process,

they seem to agree on steps for data collection. McFarlane and Castledine recommended a brief interview, systematic head to toe examination and objective observations in the first stage, and a more detailed assessment in the second stage. An assessment done within twenty-four to forty-eight hours of the patient's admission allows for planning of immediate nursing care. Although assessment is usually done at the time of admission, continuous review and reappraisal are needed. Through the process of assessment, the patient's problems are identified, analysed and interpreted.

Phase Two - Planning

The second phase of systematic nursing is concerned with planning. Yura and Walsh (1978) stated:

> "Planning is the determination of what can be done to assist the client; it involves setting goals, judging priorities, and designing methods to resolve problems." (p 31)

There are therefore a number of steps involved in the planning phase. These include deliberate setting up of goals by validating data with the patient and designing a method of action.

In the Nursing Process Workbook (W.H.O./Euro/Nurs/76.1) two factors were emphasised for planning nursing care: 1) what can be achieved; and 2) how it can be achieved. To determine these factors patients' problems have to be identified by reviewing data, and objectives have to be formulated with the patient to help solve those problems. The patient and the nurse have to work in co-operation to meet the objectives. Logical thinking, professional knowledge, and skills and attitudes are important factors in decision making. When a patient is too sick to be involved in the decision making process,

the patient's family members can be included. Kratz (1982) suggested four steps for planning care: determining priorities; setting goals; setting nursing actions; and writing the care plan. Determining priorities involves analysing the problems and deciding which problems require priority of attention; setting goals refers to the objectives formulated to alleviate problems; setting nursing actions is associated with choosing methods and techniques which enable the nurse to achieve the stated goals; and the care plan includes the problem, goal or objective nursing actions or interventions.

Therefore, the purposes of planning are to determine the priorities among problems, whether actual or potential problems, set long term or short term goals, designate specific actions and develop a written nursing care plan.

A nursing care plan is a tool or a blue print for action. It provides a direction for implementing the planned nursing care.

According to Mayers (1978):

> "A patient care plan is an abstract of data concerning a specific patient organised in a concise and systematic manner." (p 12)

The nursing care plan form includes problems, nursing interventions, and evaluation of outcome of care.

Lewis (1970) contended that a care plan helps to organise and give direction and guidance to what is done for the patient to help solve his or her problem. Without a plan nursing care is aimless. Little and Carnevali (1976) viewed the plan as a means of communication between nurses.

The terms nursing care plan, patient care plan, nursing prescription and nursing order are used interchangeably in the literature.

The following components of a nursing care plan are suggested in the Open University publication (1984):

- present or potential nursing care problems (their priority should be indicated)
- patient's responses that will indicate that objectives have been achieved
- nursing actions associated with each problem or objective, as a means of accomplishing the goal and resolving the problem
- signature of the nurse or nurses who have written the care plan.

These components are important features of a nursing care plan, and provided a basis for designing a nursing care plan for the present study.

Another important factor about nursing care plans according to Lewis (1970) and Roper et al (1980), is the continual revision or updating of the care plan. This is considered important because a patient's condition is seldom static. As the patient's condition changes, a care plan has to be updated and this is an ongoing process.

The nursing care plan should be based on sound scientific rationale.

Phase Three - Implementation

Implementation is the actual carrying out of the planned care. Implementation was defined by W.H.O. (Nursing Process Workbook W.H.O./Euro/Nurs/76.1) as:

> " ... carrying out interventions directed towards the accomplishment of specific objectives." (p 46)

The interventions comprise what the nurse does for patients or clients as individual persons in order to achieve objectives of care. This phase also includes the documentation of specific nursing interventions on the nursing care plan.

Planned action may be implemented by the nurse or nursing team, the patient or his family. Implementation of the nursing care plan does not follow strictly an inflexible prescription for care. In addition, in emergency circumstances action is taken without a written nursing care plan. Implementation of planned care depends on the nurses' intellectual, interpersonal and technical skills. Marriner (1975) stated:

> "Implementation of the nursing care plan contributes to comprehensive care because the plan considers the bio-psycho-social aspects of the client." (p 109)

Such a plan utilises holistic and individualised approaches.

In the Open University publication (1984) three factors were considered essential for nurses to implement planned care:

- nurses must be flexible in the way they organise their work
- they must be able to make decisions, on a day-to-day basis about how individualised care can be implemented
- they must be able to work in a way that provides opportunities for them to get to know their own patients.

These factors suggest that organisational, decision making, observation, communication and interpersonal skills are significant skills enhancing the success of action. Several nursing actions may be necessary for the solution of one problem, or one specific nursing action may relate to the solution of more than one problem.

Organisational skills refer to the system of work organisation. Although task allocation has its advantages, it does not facilitate individualised patient care as work or tasks follow a routine pattern. In patient allocation nurses have more contact with fewer patients which provides an opportunity to get to know their patients better. In the Nursing Process Workbook (WHO/Euro/Nurs/76.1) and the Open University publication (1984) a patient allocation system to implement planned care was advocated.

Communication and interpersonal skills help the nurse to understand the unique characteristics of her patient's physical, emotional, cultural and spiritual aspects. According to Yura and Walsh (1978) the nurse:

> "must have the ability to react to verbal and non-verbal cues, validating inferences based on observations." (p 130)

These skills help the nurse to understand whether the patient is able to view his problems as the nurse does and to will his co-operation in achieving the object. The nurse can also assess the patient's ability to participate in his care and the areas in which he needs assistance.

During the implementation phase the nurse carries out the actual planned care in order to achieve the objectives of planned nursing intervention. The focus of nursing is the patient and the nurse demonstrates interest in the patient as a person. Yura and Walsh stated:

> "Nurse actions are based on scientific rationale and directed toward promoting a suitable internal and external environment in which wellness is enhanced and illness diminished." (p 139)

Phase Four - Evaluation

Evaluation is concerned with the appraisal of effectiveness of care given to the patients, in the light of the objectives formulated. During the evaluation phase the nurse finds out whether the planned nursing intervention has met the objectives and whether reassessment, further planning, implementation and evaluation is needed.

Kratz (1982) viewed evaluation as measuring the effectiveness of nursing intervention. The definition of evaluation by Roper et al (1983) seems to be a comprehensive one:

> "evaluating involves comparison against an objective - the stated patient outcome. When the expected outcomes are not achieved, there has to be reassessment of the problem with the patient." (p 14)

Therefore evaluation deals with the comparison of the actual patient outcome against the expected outcome. Evaluation is an on-going process. Information gained in this manner becomes the basis for communication among nurses regarding the progress of patient care.

The purposes of evaluation as described by the Open University publication (1984) are:

> "- to determine whether patient goals/expected outcomes have been achieved
>
> - to measure standards of nursing care
>
> - to measure the quality of nursing care
>
> - to discover which nursing actions are most consistently effective in solving a particular patient problem
>
> - to measure staff performance." (p. 112)

The process of evaluation also serves as a tool for measuring the nursing standards, the quality of care and performance of the staff. Along with these purposes it also serves as a tool for discovering the effective nursing actions to solve a particular problem.

A number of authors, such as Kratz (1982) and Little and Carnevali (1976), suggested steps of evaluation similar to those in the Open University publication. The following steps seem to guide the process of evaluation:

- selecting observable criteria or standards related to the desired patient goals
- collecting relevant measurable and observable data
- comparing the data with the selected criteria
- making a judgement about the patient's response which reflects the comparison
- modifying the nursing care plans as a result of feedback obtained.

The first step deals with information relating to the goal in question. The goal must have been clearly set in the planning phase so that it will yield observable and measurable data. The second step deals with collection of subjective as well as objective data about the patient. Interviewing helps in collecting data on patients' feelings and expectations. Measuring and counting helps to obtain objective data such as blood pressure, temperature and pulse. Observations can be made on the patient's colour, dressing, granulation of a wound and so on. In the third step the actual outcome can be compared with the expected outcome. The fourth step emphasises the importance of making a judgement in relation to the patient's

response regarding the outcome of his care. The patient's ability to participate in his/her care can also be observed. Finally the evaluation process gives feedback to the nurse which helps to decide on whether movement has been made toward the goal or away from the goal, or there has been no change. Some authors like Lewis (1973) and Little and Carnevali (1976) seem to prefer an approach involving process and outcome criteria to evaluation. Phaneuf (1976) recommends the nursing audit method for evaluation.

Evaluation of outcome of care is a continuous process through which new goals are set and the care plans are reviewed. Mayhew (1980) considers evaluation a crucial tool in updating the plan of care.

Mayhew (1980) and the Open University publication (1984) point out the differences between evaluation and assessment. Although assessment and evaluation require similar skills of perception and judgement, they are different phases. The evaluation step demonstrates the intimate links between the four stages of systematic nursing. Evaluation can not take place unless goals have been set and some of the planned nursing actions have been implemented. Goals can only be set after identifying the problems, and problems are only identified after an assessment has been made. Evaluation takes place over a span of time and depends on whether it is a long term or short term plan. It may not always be possible to predict dates for achieving goals. Frequent observations are necessary to make frequent evaluation when there is uncertainty as to when a goal is likely to be achieved. Frequency of evaluation depends on the nature of the problem.

Evaluation provides feedback. This includes rewriting the goals, changing nursing interventions or making a further assessment.

Documentation is an integral part of evaluation. A well prepared nursing care plan seems to make provisions for documentation of evaluation. In addition to this a number of authors such as Mayers (1978) Lewis (1973), Little and Carnevali (1976) and the Open University publication (1984) have recommended tools like graphs, flow charts and progress notes.

Summary

By using the four phases of nursing process to individualise patient care, a dynamic systematic approach to nursing is initiated. One phase of systematic nursing leads to the next. The nurse and patient interact with each other and the patient's family and or significant others are involved in the actual process of planning care. Thus systematic nursing is concerned with the notion of individualised patient care and the responsibility and accountability of the individual nurse for the care of the patient. Documentation is an important aspect in all four phases of systematic nursing.

CONCEPTUAL FRAMEWORKS

Having described the four phases of systematic nursing, it is important to consider the use of various conceptual frameworks, otherwise known as nursing models for nursing practice. Systematic nursing provides a problem-oriented and scientific approach to nursing. A nursing model provides a framework or pattern to follow and gives direction to action. Therefore it is necessary to identify

a model for nursing practice. The next section of the literature review deals with conceptual frameworks for nursing practice.

Traditionally, nursing education and practice have been based on a medical model where the emphasis was mainly on a patient's disease, its signs and symptoms and medical treatment, with nursing's focus on carrying out routine procedures such as taking temperature, and giving medicines. The preparation of nurses which predominantly stressed the physical aspects of care still persists in countries like India.

In the light of changes in their health care philosophy, nurses such as Abdellah et al (1960) and Henderson (1966) recognised the need to change nursing curricula. Although they did not explicitly identify models for nursing these contributions seem to be important as a starting point to the discussion on conceptual frameworks, or nursing models. The terms 'conceptual frameworks' or 'models' are used synonymously.

As early as 1960, Abdellah et al considered patient-centered nursing and a problem-solving approach important in nursing education and practice. They identified twenty-one nursing problems to introduce patient-centered approaches in a curriculum for an associate degree programme - thus shifting the emphasis from a medical model to a nursing model. The problems were grouped as physical, physiological, emotional and interpersonal, sociological or community problems.

Similarly, Henderson (1966) emphasised the importance of each nurse developing a personal concept of nursing. Henderson viewed the patient as a person, an individual and a whole. The concept of nursing she developed was that the nurse substitutes for what the

patient lacks in physical strength, will or knowledge, in order to make him complete, whole or independent. Henderson considered the function of the nurse an important one in helping the patient reach the optimum level of health. Thus referring to the function of the nurse Henderson (1966) stated:

> "she must, in a sense, get 'inside the skin' of each of her patients in order to know what he needs." (p 16)

The goals of nursing were defined in terms of helping the patients with the following activities:

> "1 Breathe normally.
>
> 2 Eat and drink adequately.
>
> 3 Eliminate body wastes.
>
> 4 Move and maintain desirable posture.
>
> 5. Sleep and rest.
>
> 6 Select suitable clothes; dress and undresss.
>
> 7 Maintain body temperature within normal range by adjusting clothing and modifying the environment.
>
> 8 Keep the body clean and well groomed and protect the integument.
>
> 9 Avoid danger in the environment and avoid injuring others.
>
> 10 Communicate with others in expressing emotions, needs, fears or opinions.
>
> 11 Worship according to one's faith.
>
> 12 Work in such a way that there is a sense of accomplishment.
> 13 Play or participate in various forms of recreation.
>
> 14 Learn, discover, or satisfy the curiosity that leads to normal development and health and use the available health facilities." (pp 16 and 17)

Henderson believed in the knowledge component and skills needed for nursing as indicated in the statement:

> "In helping the patient with these activities the nurse has infinite need for knowledge of the biological and social sciences and skills based on them." (p 17)

Later literature highlights these early authors' concepts of nursing. In recent years a number of nurse theorists have developed various conceptual models for practice. These models are based on beliefs about man, values, goals of nursing and the knowledge on which practice is based. As such, a nursing model offers a global understanding of man and serves as a framework for assessment of each phase of systematic nursing. Some of the more common models are discussed here.

Orem (1980) developed a model based on the concept of self-care and gives the following description of self-care:

> "In the term self-care, the word self is used in the sense of one's whole being. Self-care carries the dual connotation of 'for oneself' and 'given by oneself'." (p 35)

Self-care is the ability of individuals to initiate and perform activities on their own behalf in order to maintain life, health and well-being. Orem identified eight categories of needs which form a common core of requirements for effective living. These are: air; water; food; elimination; activity and rest; solitude and social interaction; prevention of hazards; and promotion of normality.

The self-care model helps nurses to assess the self-care ability of patients and thus plan appropriate nursing care to assist with self-care deficits. Orem identified five helping methods:

> "1 acting or doing for another
>
> 2 guiding another
>
> 3 supporting another (physically or psychologically)

4 providing an environment that promotes personal development and

5 teaching another." (p. 61)

Orem's self-care model seems to make use of Maslow's (1954) hierarchy of needs. Maslow presented a model based on a hierarchy of human needs. Though it is not a nursing model it seems to guide the conceptual frameworks of those who favour the concept of needs to the notion of problems. The hierarchy of human needs as presented by Maslow is:

- physiological or survival needs
- security and safety needs
- belonging or affection needs
- self-actualisation needs.

Maslow contended that one class of needs must be satisfied before subsequent levels can be met.

Daubermine and King (1973) presented a dynamic, interacting systems model in their curriculum study. King defined nursing as:

> "a process of action, reaction, interaction, and transaction, whereby nurses assist individuals of any age and socioeconomic group to meet their basic needs in performing activities of daily living and to cope with health and illness at some particular point in the life cycle." (p 89)

In this dynamic, ongoing, interpersonal process of nursing, the nurse and patient are viewed as systems, each affecting the behaviour of the other and both being affected by factors within the situation. Daubermine and King identified three interacting systems in a general systems framework. These are:

(1) individual = personal system

(2) groups = interpersonal systems

(3) society = social systems

Nursing is conceptualised as an ongoing interpersonal process in which two or more persons interact over a period of time in a nursing situation to achieve a goal. They bring to the nursing situation their goals, expectations, values and beliefs - all of which influence their behaviour. Nurses and patients react to each others' perceptions and to the situation. During the process of nurse-patient interaction their behaviour can be observed and inferences can be drawn about their mental judgements and perceptions. A transaction occurs when a relationship is established and goals are determined by both nurse and patient. The important components in this model are interaction, perception, communication, transaction, self, role, stress, growth and development, and time and space.

A unified model was presented by Riehl and Roy (1980). They view the individual as a unified whole and a system. The individual's system interacts with his environment. During the process of interaction the person maintains lines of defence and the internal regulating mechanism by the principles of homeodynamics. The goal of nursing is to help the individual to realise his maximum potential and to maintain the equilibrium of his system. This contributes to healthful and harmonious living. They view a problem-solving method as a way to fulfill this goal of nursing. There appears to be some similarity between the aspect of interaction in the dynamic interacting model of Daubermine and King (1973) and in the aspect of self-care in the self-care model of Orem (1980).

Roy (1980) developed an adaptation model of nursing based on the belief that health and illness are adaptive responses of the individual to the environment. Roy viewed the person as an open, inter-

active, interdependent and adaptive system. The basic assumption is that the individual has biological, psychological and social components to his life and responds to stimuli in the changing environment. The responses one makes determine one's bio-psycho-social health and the position on the health and illness continuum. These responses are categorised as physiological, self concept, stress, role function and interdependence.

Roy's concept of nursing is that people make physiological adaptations. The self concept refers to how they view themselves, and their role function to how they react to people's expectation of them. Lastly the concept of interdependence deals with how dependent or how independent they are.

Saxton and Hyland (1979) presented a stress-adaptation model. They believed that an individual faces stress throughout the life cycle and makes adaptive responses as a whole person. The aim of nursing is to assist the individual to make healthy adaptations. Adaptations can be anatomical, physiological or psychological responses that occur as a reaction to change. The purpose of such adaptations is to help the individual to continue functioning effectively. Although differences exist between the two adaptation models (Roy 1979 and Saxton and Hyland 1979) the concept of nursing seems to be more or less the same.

A model of living based on a set of twelve activities of living was the first model developed by British nurses (Roper et al 1980 and 1985). The authors believed that the set of twelve activities collectively contributes to the complex process of living from

conception to death and thus these are activities of living. The twelve activities of living are:

1) maintaining a safe environment
2) communicating
3) breathing
4) eating and drinking
5) eliminating
6) personal cleansing and dressing
7) controlling body temperature
8) mobilising
9) work and playing
10) expressing sexuality
11) sleeping
12) dying.

The model incorporates a dependence/independence continuum related to the life span of the individual. In moving through the life span the individual is continually changing and every activity of living is influenced by physical, psychological, sociocultural and economic factors. The model also acknowledges that there are periods in life when a person can not perform or can no longer perform certain activities of living independently, depending on the person's age and stage of health.

Nursing is viewed as helping the patient to solve, alleviate, cope with, or prevent problems related to activities of living. The model of nursing incorporates the four phases of the nursing process.

These are, assessing the level of the individual's independence and dependence in relation to the activities of living, planning and giving care and, finally, evaluating the outcomes of care. This is a problem-oriented model and the concept of nursing seems similar to that of Henderson (1966).

The discussion thus far suggests that the various nursing models are more similar than different. For example, similarities exist between the activities of living model and the self-care model, the dynamic interacting systems model and the unified model, and the adaptation model and the stress-adaptation model.

RESEARCH

Little research has been done on implementation of nursing process. The research thus far has seemed to focus on introducing one aspect of nursing process or measuring the effectiveness of nursing process.

The principle of the individuality of the patient and the nurse and also the principle of individual responsibility were incorporated in the study by Grant (1977). According to Grant it seems essential that each nurse has to be assigned to give complete care to one patient or to a group of patients in order to incorporate individualised patient care. Grant's study suggested that individualised nursing is associated with patient allocation which encompasses the responsibility of a nurse for a patient or patients.

In an article, Ashworth et al (1978) demonstrated the use of a nursing history sheet and nursing assessment modified from the Roy model. Finally a complete set of records was developed. The

study suggested that introduction of systematic care planning takes time and patience. It emphasised the importance of involving the ward staff, and the need for education of the staff prior to the implementation and provision of opportunities for practice. The need for continual support of staff if the documentation is to continue is reported.

The researchers considered the study worthwhile as it demonstrated some encouraging outcomes such as:

- satisfaction among patients and their relatives with nurses' taking an interest in patients as persons
- increased knowledge of nurses about their patients
- increased job satisfaction of nurses
- increased opportunities for students to learn and practice
- approval of care planning by medical staff
- documentation of care planning identified more clearly the contribution of nursing to patient care.

In a similar research project undertaken by Hunt (1978), the purposes were to introduce written care plans and to evaluate the effect of their use. The two main aims were: "1) to find out whether care plans could be used as a service tool within a normal ward and without the use of any extra nurses. 2) To find out whether care plans produced any measurable changes in either the nurses' knowledge about patients or the information recorded about the patient in the Kardex." Problem-oriented care plans were used to allow nurses to record patients' nursing problems, the objective for each problem, the care to be given to attain the objective for each

problem, and the final outcome and assessment of whether the objective was met.

Marks-Maran's (1978) study was concerned with studying the effect of improving the specificity of nursing instructions given to patients to ensure that patients received the nursing care prescribed by the ward sister.

Lauri (1982) undertook an action research project to develop nursing process method in working with elderly incontinent patients. Lauri considered certain factors important for the development of the programme. These are: educational preparation of nurses; involvement of nurses; and encouraging creative thinking. Lauri (1982) stated:

> "By means of action research the development of nursing process is possible." (p 306)

Grypdonck et al (1979) demonstrated action research strategies in a research project concerned with holistic nursing care. They first diagnosed the problem in nursing practice and then proposed a reorientation model which they referred to as "integrating nursing", but which in fact was nursing process. In order to achieve this goal, an education programme was conducted. Nursing staff were closely involved in the change process. This in turn seemed to bring about a desired change in their attitudes.

Grypdonck et al (1979) recommended action research strategies for introducing systematic nursing. They contended that implementing systematic nursing (nursing process) led to new developments in nursing practice, such as patient assignment, patient care plans and records, group discussions and reports. This seemed to improve patient care and increase job satisfaction among nurses.

Miller (1984) in a comparative study of nursing process and traditional patient care stated that studies on workload tend to assess the quantity of nursing care rather than the quality. Miller contended:

> "although there are very good, sensible and logical arguments for nursing process, there is very little evidence based on research findings to validate its effectiveness." (p 56)

Therefore, Miller recommended evaluative studies to determine the effectiveness of patient care. Miller compiled questionnaires for interviewing patients and staff and examined physical, psychological, and social outcomes of care given in each type of ward. Physical outcomes were examined by measuring the patients' physical dependency, including incontinence, mobility, pressure sores and eating behaviour. The death rate among patients was also noted. Psychological outcomes studied were the patients' satisfaction with their care, their happiness, and feelings about their health.

Miller summarised her findings as suggesting that, whereas nursing process appears to have little measurable effect on patient outcomes for short-stay geriatric patients, long-stay patients were happier, less incontinent, and less dependent in the nursing process wards.

Cuddiah (1979) recommended that the audit technique outlined proved very useful as an easily administered quality control assessment tool. The audit tool seemed useful especially in situations such as health care processes where it may be impractical to employ more complex and extensive techniques.

To introduce change in psychiatric nursing care intended to organise the delivery of holistic care, Towell (1979) emphasised a systems approach as a conceptual framework to link research with the problem of change in nursing care. The project had an implied action research strategy. The work was carried out in collaboration with practitioners. The intention was to contribute to the solution of practical problems and to increase understanding of issues being studied. Towell contended that a successful change is likely to be fostered by attempting mutually reinforcing action through professional, administrative, educational and other channels, and also at a number of different levels of health care organisation from the ward or primary care team upwards. Towell further recommended that those who are involved in innovation need support. Further opportunities should be provided for illuminating any issues in question. Working in collaboration with all agencies involved in change is essential.

Hawthorn (1983) used a modified activity sampling method to measure change in nursing practice. She recommended objective measures for evaluating the effects of changing the pattern of nursing care.

CONCLUSION

The literature indicates that great importance has been placed on a systematic method for nursing practice. Systematic nursing is a scientific method which aims to introduce and describe the concept of individualised care. Although British nurses were slow in accepting nursing process as part of nursing practice there seems to be an increased awareness of the value and interest in its implementation.

The conceptual models developed by American nurses are of various approaches for example, Orem's (1979) self-care model, the dynamic interaction model of Daubermine and King (1973), and the adaptation models of Roy (1980) and Saxton and Hyland (1979). The literature does not provide evidence of many models developed by British nurses. But the model of living developed by Roper et al (1980) seems to be a consistent one, as it focuses on a problem-oriented approach and clearly identifies the four phases of systematic nursing. Since systematic nursing is basically a problem-solving approach, a problem-oriented model such as the model developed by Roper et al appears to be more appropriate for the present study. The literature also highlights the need to construct one's own conceptual model for a holistic approach to individualised patient care, and to introduce nursing models in teaching. The models also influence the theoretical content of systematic nursing and provide the basis for assessment and implementation of nursing actions, thus making the systematic nursing purposeful.

The content of nursing includes the recognition of patients as individuals who may have physiological, psychological, social and/or emotional problems which may or may not be related to medical diagnosis. Often patients need assistance in dealing with actual or potential problems. The aim of nursing is to provide individualised care to the patient in order to assist him to be as independent as possible in performing the activities of daily living. In addition other activities prescribed by the physician need to be carried out either by the patient himself or by the nurse. In order to give individualised care to the patient a series of activities has to take

place. This has to be done systematically by means of assessing the patient's problems, planning and implementing care and evaluating the effectiveness of care.

In the literature there is emphasis on the argument that change has to be planned if it is to be successful. Implementing systematic nursing can be equated with introducing change in nursing practice. A recognition of this underpinned the World Health Organization's initiative for a multinational study to explore patients' needs for nursing care. Eleven countries within the European Region of W.H.O. participated in this medium-term programme which has focused on 'the nursing process'. The Scottish component of the study is presented in a report by Farmer (1985). Due to the fact that the W.H.O. study was ongoing at the time, it was not possible to draw on that work in the development of the present study.

Certainly, the literature highlights the importance of a carefully thought out strategy for change. Towell (1979) and Gryponck et al (1979) successfully demonstrated planned change using action research strategies. There is a suggestion in the literature that in other work on nursing process, authors such as Ashworth et al (1978), Marks-Maran (1978) and Hunt (1978) did not introduce the nursing care plans within the planned change model. The researchers in these projects seem to emphasise using action research strategies although they did not conduct their research within the planned change model.

Research done thus far, for example Cuddiah (1979), Hawthorn (1983) and Miller (1984), seemed to concentrate more on outcome than process. The literature highlights the lack of in-depth descriptive action research. Although outcome studies are important what is also needed is descriptive action research on the process of implementation of systematic nursing.

CHAPTER 4

METHODOLOGY

INTRODUCTION

This Chapter comprises a description of the instruments and teaching methods designed for this study; and the process of action research, which included participant observation, interviews, discussions and also implementation of the teaching programme. The study setting and the sampling are also discussed. The method emerged from the theoretical framework developed on planned change and action research strategies. The action research method is described in five phases: 1) initial survey of environment; 2) assessment of change environment; 3) preparations for change; 4) the process of change; and 5) stabilising change.

ACTION RESEARCH

The main aims of this research were to introduce systematic nursing through an organised change process and to describe the outcome of change. Grypdonck et al (1979) suggested an action research approach to implement a systematic approach to the delivery of nursing care and they further maintained that it was a research method that lead to changes in a situation by those who were usually involved in it. Action research was a process involving an on-going series of events and actions. It also concentrated on finding a solution to a problem situation.

As stated by Cope (1981):

> "Action research is the process of first of all collecting a systematic set of data about an existing system which is likely to be an organisation or some part of one. This data is collected with some specific aim or objective in mind (which in turn fashions what particular types of data are collected) and then fed back into the system." (p. 11)

This flexibility was a unique and fundamental quality of action research, which offered feedback to those who brought about change and also to the system to be changed.

Isaac and Michael (1971) stated that the purpose of action research was:

> "To develop new skills or new approaches and to solve problems with direct application to the classroom or working world setting." (p. 27)

This study has direct application of these and other purposes, listed by Abdellah and Levine (1965) as follows:

> "To make a decision
>
> To develop a new programme, product, method or procedure
>
> To evaluate a programme, product, method or procedure." (p. 35)

Some important characteristics of action research described by Isaac and Michael (1971) had relevance to the present study and made action research the method of choice. The general characteristics of action research were:

- action research had a practical and direct relevance to an actual situation in the working world
- provided an orderly framework for problem-solving
- action research was flexible and adaptive; allowed changes during the trial period
- the investigation took place in a natural practice setting
- the investigation was concerned with the activities that were part of the usual practice
- the practice was executed by ordinary agents

- the investigation dealt with matters that were relevant to the ordinary activity of the practitioners and that were experienced as such by them.

One of the limitations of action research as a research method, as expressed by Fox (1981), was that the findings were considered to be limited to the setting actually studied, whereas in fundamental research the findings were considered applicable to the populations and universes sampled. Susman and Evered (1978) in turn proposed that action research could be justified as a scientific method by locating its foundations in philosophical viewpoints, and that it could contribute to the growth of knowledge. Grypdonck (1980) also stated that:

> "Action research can make an essential and unique contribution to scientific research and theory construction and .... the advantages or the consequences of action research are not limited to those who are involved in the investigation itself." (p. 542)

Action research thus received a meaning and a scope that went beyond the particular local situation.

To implement a holistic approach to nursing, Grypdonck et al (1979) conducted action research in five phases: these were:

Phase I - Preparatory study which had two parts:

a) diagnosis of difficulties in patient care in hospital

b) analysis of difficulties of nursing care in hospitals

Phase II - Designing the re-orientation model

a) definition of objectives

b) evaluation of existing models

c) model for re-orientation of work on the nursing unit

d) integrating nursing; an integration of values in an operational model

Phase III - Test of model in the pilot hospital

a) selection of the pilot hospital

b) preparation of the hospital units

c) introduction of the integrated nursing model in the pilot units

d) follow-up

e) comments on the pilot hospital study

Phase IV Construction of an introduction model

a) the co-ordinator

b) steps of the introduction model

c) implementation

d) growth process - from re-organisation to re-orientation

e) implementation of plan in other units

Phase V - Wider scale implementation of the model

a) making integrating nursing known to hospital and nursing administrators

b) selection of hospitals

c) training the co-ordinators

d) follow-up of the co-ordinators

e) second training for co-ordinators

f) follow-up of co-ordinators

The above-mentioned criteria, purposes and phases suggested that action research was the most appropriate approach for this study.

Action research was also considered as a form of descriptive study. Descriptive study was concerned with an extremely broad range of phenomena. In this type of research the primary aim was to discover new facts, that is to provide a factual, descriptive picture

of a situation. In nursing, descriptive study had yielded important data for programme planning and for decision making. Abdellah and Levine (1965) stated that:

> "The aim of descriptive study is to uncover the new facts about the situation under study. In nursing and patient care, descriptive studies represent the most common type of research. Such studies have covered a wide range of subject matter." (p. 518)

Owing to the complex nature of the present study - that is, the changing health care system in India, existing nursing practice, and the changes to be proposed, implemented and evaluated - descriptive study was considered appropriate. The method adopted in this study was a combination of action research and descriptive approaches and methods of data-collection, including participant observation and interviews. Polit and Hungler (1983) recommended interviews and participant observation to learn more about a group of people, an institution or some specific phenomena. Although it was an assumption that nurses in India lack knowledge about systematic nursing, it was also essential to obtain data about actual nursing practice. Informal group meetings, unstructured interviews and participant observation provided opportunities to collect data and to clarify the situation. Examination of the record system facilitated making an assessment of nursing practice.

THE STUDY SETTING

The two hospitals selected for the study, namely Naraspur Christian Hospital and Christian Medical Centre, Pithapuram, were under the CMAI, Board of Nursing Education, South India. The hospitals were associated with Schools of Nursing which offered a three-year general nursing and a nine-month midwifery training. The

Board comprised 16 Schools of Nursing in four states (Andhra Pradesh, Karnataka, Kerala and Tamilnadu) and all the Schools trained general nurses and midwives. Both the selected hospitals are in one state, Andhra Pradesh, but in different districts; Narsapur is in West Godavari district and Pithapuram in East Godavari district.

The selection of the hospitals was made on the basis of their willingness to participate in this exploratory study, and the following features seemed to be common to both hospitals.

- The hospitals appeared to be suitable on account of their similarity in size, patient population and general nurse training programme.
- The distribution of population was such that patients were admitted from both rural and urban areas.
- The hospitals were general hospitals, hence both medical and surgical patients would be available for the study.
- The students accepted in these Schools of Nursing were similar in their education and cultural background.
- The expense of travelling and time involved were manageable by the researcher.
- One language (Telugu) is common to these two districts so the researcher did not find language a barrier in communicating with the patients and other non-English speaking workers in the hospitals.

A description of the selected hospitals sets the scene for the study.

Narasapur Christian Hospital

The Narasapur Christian Hospital was founded by British missionaries in 1915. It was a 206 bed general hospital plus 90 baby cots.

Of the 206 beds, 92 were allocated for medical and surgical wards and 114 for gynaecological and obstetric wards. Altogether there were four wards in this hospital, one ward for male medical and surgical, one for female medical and surgical, one for maternity and the other for patients with obstetric problems. Besides all the other essential departments the hospital also had a community health programme, whereby the basic health clinics were held in the nearby villages.

The Nursing Superintendent was the head of the nursing department; there were an assistant Nursing Superintendent, 10 registered nurses and midwives, 46 auxiliary nurse-midwives and also two health visitors. The Director of Nursing Education was in charge of the School of Nursing and there were four other sister-tutors.

Christian Medical Centre, Pithapuram

The Christian Medical Centre, Pithapuram is a Baptist mission hospital founded by Canadian missionaries. It was a 200 bed hospital and catered for medical, surgical, paediatric, gynaecological and maternity patients. Hence the hospital had one male medical and surgical, two female medical and surgical, one paediatric and one maternity ward. The hospital also had all other essential departments including a community health department, and eye, physiotherapy and leprosy clinics.

The nursing service department is headed by the Nursing Superintendent. The ward sisters had obtained an additional certificate in ward management after their general nurse training. The hospital was well staffed. There were 32 registered nurse-midwives and 12 auxiliary nurse-midwives. The Director of Nursing Education was

responsible for the school administration. Four sister-tutors participated in teaching.

Ward Design

Some hospitals in India do not have separate wards for medical and surgical patients. The selected hospitals had combined medical and surgical wards. Two wards were selected from the Narsapur Christian Hospital, one male medical and surgical and one female medical and surgical ward. Each ward had 40-50 beds. Three wards were selected from the Christian Medical Centre, Pithapuram; one male medical and surgical and two female medical and surgical. The number of patients in each of these wards varied between 25-35. The reasons for selecting medical and surgical wards were as follows:

- the researcher had specialised in medical and surgical nursing
- general nursing students were posted to these wards for their clinical experience and they were included in the study
- the length of hospitalisation of these patients would allow time to make care plans.

Study Sample

Male and female medical and surgical, and gynaecological patients were chosen for this study. The study population was 500 patients and the number involved in the study varied between 50-100 in the two study hospitals. The following conditions seemed appropriate for choosing the patients.

Medical Patients	Surgical Patients
(i) Aged 16-70 years	(i) Aged 16-70 years
(ii) Male and female	(ii) Male and female
(iii) New admissions	(iii) Admitted for elective surgery
(iv) Planned or unplanned admissions	(iv) In the hospital the day before surgery so that a nursing assessment may be made
(v) Available for a period of time during which a nursing assessment may be made and four consecutive nursing care plans completed	(v) In the hospital for a minimum of five days following surgery

Although these conditions were used especially for the type of admissions, and the length of hospitalisation they were not strictly followed. Alterations were made and flexibility was maintained in choosing patients.

Nursing Participants

Registered nurses and senior general nursing students were involved, as they were able to collect the data. Even though it was decided to include sixteen registered nurses, that is, the ward sisters and the registered nurses, and sixteen general nursing students; this number changed depending on the availability of trained nurses and students and their rotation. The rotation of nurses took place within the study wards, hence the same nurses participated throughout the study.

The reasons for involving the above-mentioned ward sisters and trained nurses were that this was a more stable group in the wards because of less turnover. They were experienced in managing the wards and also were responsible for patient care in their wards. The education programme was therefore undertaken without disruption.

The rationale behind selecting the senior general nursing students for this study was that they had the theoretical background of social sciences such as psychology and sociology along with medical and surgical nursing. They also had obtained considerable clinical experience which would enable them to assess patients' problems, plan and give care to the patients. Both the trained nurses and students were able to help with documentation. It is clear from the above discussion that the involvement of nurses was not random but purposive.

DATA COLLECTION

Prior to the development of data collection tools, the researcher obtained copies of nursing records from the study hospitals. The purpose was to assess the kind of records used and the data that could be obtained from them. The nursing records seemed to be poorly designed and meant for documentation of tasks. Bearing this in mind, two data collecting forms were developed: 1) the Nursing Assessment Form; and 2) the Nursing Care Plan (see Appendices 2a, 2b and 3).

The Nursing Assessment Form provided data on:

- the patient's personal data
- the patient's medical data
- data related to the activities of daily living, that is, data on physiological, psychosocial and spiritual problems.

The Nursing Care Plan provided data on:

- the patient's problems
- objectives for the nursing care plan
- nursing care planned to resolve the problems.

- care given to patients

- the outcome of care given.

One comprehensive record was more acceptable than a number of sheets. In developing the data collection forms, the records described in the Open University publication (1984) were taken into consideration as they seemed to be more comprehensive, fewer in number and more practicable to introduce systematic nursing in India. The data collection forms were designed in English as all the hospital records in India are kept in English.

The above-mentioned forms for data collection were submitted for discussion, modification and approval by the Nursing Superintendents of both hospitals and were pre-tested.

Since systematic nursing is a new concept in India all precautions were taken to avoid duplication of medical records, and any misunderstanding and misrepresentation by the medical practitioners. Care was taken to keep the records to a minimum. The existing records were made use of with modifications. Introducing too many records at one time would give a wrong impression that systematic nursing was mainly concerned with recording. Economy of time, material and cost were taken into consideration. Since information needed in the records was factual it was not threatening or challenging to the ward nurses.

Documentation is implicit in the systematic method. As McNeil (1978) states:

> "Documentation means <u>done</u> and no documentation means <u>not done</u>." (p. 1)

The nursing records served as important tools for implementing systematic nursing. According to Prophit (1980) systematic nursing

is not complete without documentation. Documentation provides all the important information necessary for making a nursing assessment and planning nursing care.

THE PROCESS OF CHANGE

In order to implement systematic nursing, change was carefully planned and monitored. The researcher's position was as an external change agent effecting and stabilising change in the hospitals selected. Lippitt's (1973) theory of planned change embodied action research strategies. Incorporating these strategies and also the phases of action research in Grypdonck et al (1979), an action research method was developed by the researcher for this study. Change was implemented and described using this method. The process of change was concerned with how change took place; outcome was concerned with what changes took place as a result of implementing systematic nursing.

The action research conducted is described in five phases. Figure 4 shows the phases of the action research design for the study.

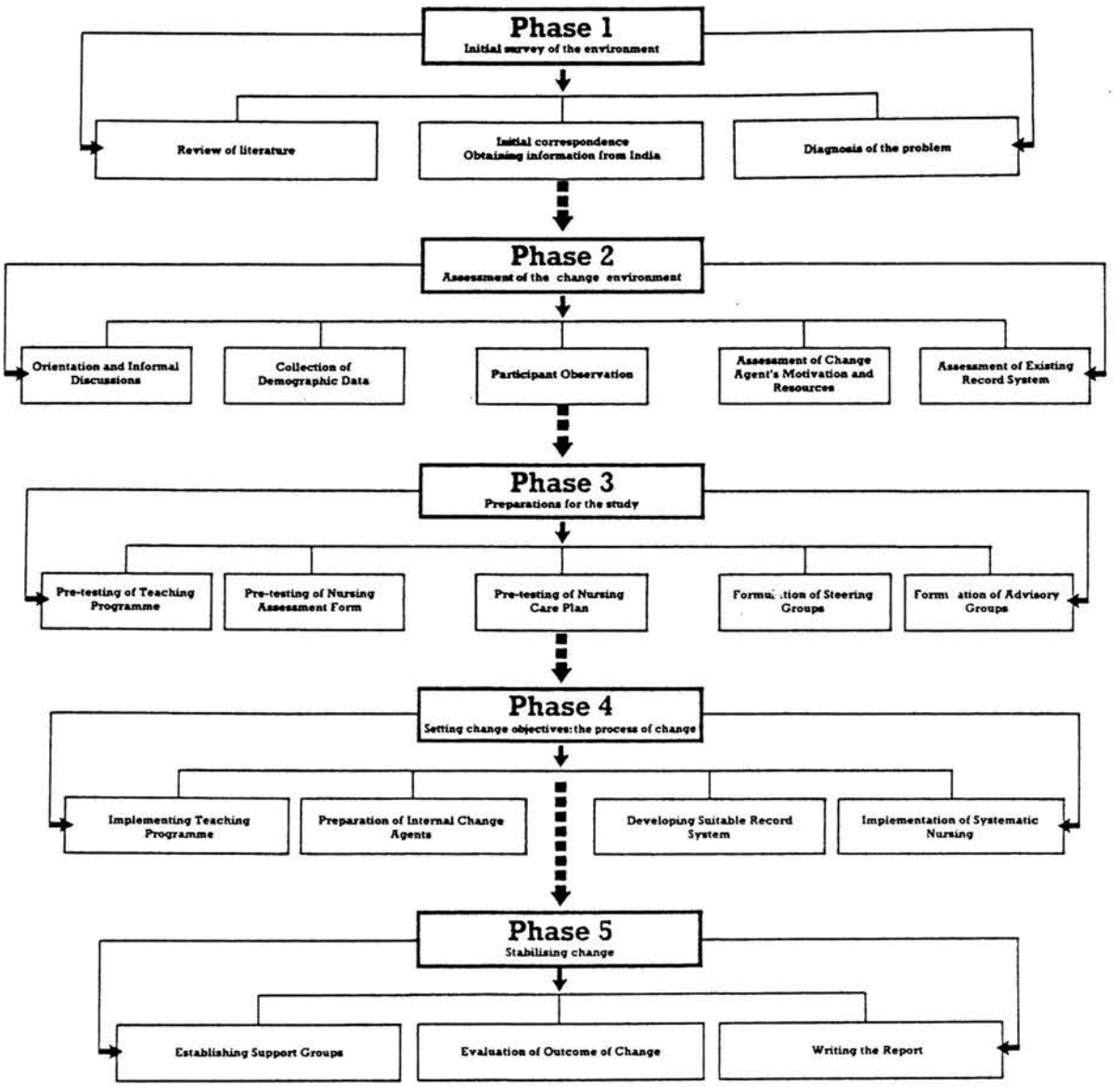

Figure 4: The Flow Chart of the Phases of the Action Research Design for this Study

Phase 1 - Initial Survey of the Environment

The first phase of the study was concerned with an initial survey of the change environment. During this phase the researcher corresponded with the Nursing Superintendents of the study hospitals and obtained necessary information about the hospitals and Schools of Nursing. The information collected suggested that the nursing practice in these hospitals was task-oriented. A literature review was undertaken on systematic nursing and change. Permission was obtained from the Medical Superintendents to undertake the study.

Phase 2 - Assessment of Change Environment

During this phase an exploratory study was undertaken to assess the change environment before the change was introduced. Although an assumption had been made about the existing problem in nursing practice, the problem had to be clarified within the specific situation. In order to do this it was essential for the researcher to go to the hospitals selected for the study and make initial contact and orient herself to the field situation. It was also necessary to have informal discussions and unstructured interviews with the hospital administrative committees, Nursing Superintendents, Directors of Nursing Education, ward sisters, registered nurses, sister tutors (equal to nurse-tutors in the U.K.) and general nursing students in order to collect demographical data. This in fact created an awareness of the oncoming change and helped to assess their attitudes, values, expectations and also their willingness to change. The researcher spent two months as a participant observer in the study hospitals and this enabled her to assess:

- existing nursing practice
- motivation and capacity for change
- methods of communication
- administrative structure
- staffing pattern
- patient admission procedure
- record system
- the decision making system in relation to patient care
- in-service education programme
- inter-personal and intra-professional relationships
- nurse-patient relationships and communication
- the change agent's motivation and resources
- and also the researcher's ability to establish positive professional relationships, mutual trust and credibility.

It was hoped that this second phase of the study would help to assess the general situation and to make initial contacts in order to select group leaders, internal change agents and support groups; and also to share experiences in nursing and to discuss the problem-solving approach in nursing.

Phase 3 - Preparations for the Study

It was felt that the pre-testing of the teaching programme, nursing assessment form and nursing care plan was essential prior to the main study.

Pre-testing

The teaching programme was tested with the tutors and the ward sisters in the study hospitals. This served a dual purpose of pre-testing as well as preparing them adequately to implement change.

The Assessment Forms were tried out with eight second and third year general nursing students respectively, two trained nurses and two ward sisters in each hospital.

The Nursing Care Plans were tried out with eight patients from each hospital; four from the male medical and surgical wards and four from the female medical and surgical wards.

Necessary amendments were made before the main study. This phase took one month.

Formation of steering groups

In order to promote and establish new connections, the steering groups were formed involving Nursing Superintendents, their assistants, Directors of Nursing Education, sister tutors and ward sisters of both hospitals who participated in the research. The steering groups were involved in discussions of the project and the decision making. The objectives were:

- to provide assistance with in-service education when required
- to participate in planning the change activities
- to provide assistance in introducing patient allocation
- to assist with the implementation of systematic nursing when required
- to monitor and manage change once introduced
- to co-ordinate the change activities
- to make recommendations and co-ordinate the activities of

nursing practice and nursing education

- to provide a link between nursing practice staff, school staff and students
- to help with the record review system
- to co-ordinate the activities of support groups and to monitor developments through records
- to assist with stabilising change
- to assist with evaluation of the outcome of change.

A bi-weekly meeting of the steering group was proposed and the researcher was a resource person providing information and liaison wherever necessary, and monitoring change.

Formation of the advisory group

The advisory group was formed comprising the Nursing Superintendents and the Directors of Nursing Education of the two study hospitals. This group was expected to offer expert opinion on matters related to the change process, co-ordinate the change activities, and also examine and review the record system.

It was decided that the advisory group should meet twice during the exploratory study and preparations for change, and twice during the main study. The researcher was the resource person.

Formation of support groups

It was also decided to form support groups among participating nurses during the main study, to meet individual learning needs, and to motivate and encourage their participation in order to stabilise change once systematic nursing was introduced.

Patient allocation

To introduce the concept of individualised patient care, it was planned to introduce patient allocation on completion of the exploratory study. Individual patients were assigned to individual nurses even within a small group of patients in the study hospitals. Since the purpose of this study was to change nursing practice from task-allocation to a systematic problem-solving approach, introduction of patient allocation laid foundations for systematic nursing.

Phase 4 - Setting Change Objectives - the Change Process

This phase was concerned with the main study, that is, the implementation of systematic nursing. Although the researcher assumed the role of an external change agent in order to motivate and implement change, the change had to be developed by the nurses themselves. Mauksch and Miller (1981) contend that if nurses are motivated they can support, participate in or implement or even initiate change. It seemed important that the change agent should influence the client system for change, and demonstrate competence in knowledge, practice, inter-personal relationships and communication skills. Prior to the implementation of systematic nursing, the change environment was reassessed for the stability of patient allocation and change objectives were formulated.

Introducing the teaching programme

The teaching programme was conducted by the researcher. The teaching package on systematic nursing in the Open University publication (1984) was used, with adaptations wherever necessary. The objective of the teaching programme was to prepare nurses

adequately to implement systematic nursing in the selected hospitals. See Appendix 4 for the aims of the teaching programme, course outline and time schedule. The purpose of the education programme was to effect change in nursing practice from traditional task-oriented nursing to a scientific, systematic and problem-solving approach.

Various conceptual models such as the activities of living model, Roper et al (1980); the self-care model, Orem, (1980); the stress-adaptation model, Saxton and Hyland (1979); and the holistic model, Sirra (1984), were introduced

These models were introduced as they served as a framework for assessment of each phase of systematic nursing, thus giving direction and making it purposeful.

The activities of living model of Roper et al (1980) helped nurses to assess patients' levels of independence in activities of living and the assistance they needed, so that appropriate nursing intervention could be planned. Similarly, the self-care model of Orem (1980) helped to assess the self-care ability of patients and to plan nursing care. The stress-adaptation model of Saxton and Hyland (1979) helped to conceptualise the adaptations patients made to cope with various levels of stress and to plan care accordingly. The holistic model was developed by the researcher in 1984. This model helped to view the patient as an individual, a unified whole; to assess his physiological, psychological, social and spiritual problems and to plan care to help him solve these problems. See Appendix 17b for a description of the holistic model.

The activities of living model of Roper et al (1980) was adopted in introducing systematic nursing. The nurses were introduced to the holistic approach to nursing care, based on the activities of daily

living to help solve the physiological, psychological, social and spiritual problems of patients. The aim was to shift the emphasis from medical models to nursing models in order to plan and give individualised, comprehensive care, which includes prevention of disease and promotion and maintenance of health.

The teaching took a modular form as introduced by the Open University. Slide projector, overhead projector, role play and simulation were used. Group work and practical sessions were conducted. Involvement of trained nurses and students mainly depended on their willingness and ability to participate in role play and simulation. Information was provided on systematic nursing; this included articles and hand-outs. The researcher was available for discussion, to motivate and encourage nurses.

Sister tutors were prepared as group leaders and were contacted in the absence of the researcher. The tutors and the ward sisters were also prepared as internal change agents to monitor and manage change. With the help of the advisory group, a suitable record system was developed.

The implementation of systematic nursing

The implementation of systematic nursing followed the teaching programme. Prior to the implementation of systematic nursing a conducive change environment was established. It was felt necessary to set an appropriate starting date in the study hospitals, when the maximum number of nurses were available and the work load was low. The four phases of systematic nursing were introduced with the help of the record system and each phase was carefully monitored.

The first phase of systematic nursing was concerned with nursing assessment and identifying the patients' problems; the second phase with prioritising the problems, formulation of nursing objectives and planning the appropriate nursing intervention. The third phase involved the giving of planned care; and the fourth, evaluation of the outcome of care given. Data collecting tools were used as follows:

- how to use the Nursing Assessment Forms was demonstrated in the first phase of systematic nursing
- how to use the Nursing Care Plans was demonstrated and practised in the second phase
- planned care was implemented in the third phase
- using the evaluation column in the nursing care plan was practised in the fourth phase.

It took three months to introduce all four phases of systematic nursing. The strategies for change were practised throughout the change process.

Phase 5 - Stabilising Change

The last phase was concerned with establishing, maintaining and continuing the change,which was very important. The tendency to go back to the old system was a possibility.

Preparation of internal change agents and establishing support groups enabled the stabilisation of change. The Nursing Superintendent, as the chairman of the steering group, co-ordinated the activities of support groups with the help of steering group members. They helped in reinforcing change, motivating the support groups and individuals, and meeting their learning needs; and were available as

resource persons. They were given instructions on planning change and the role of the change agents, and were prepared to plan and manage the change. The individual's learning needs and capacity to change were taken into consideration. Continuous feedback on systematic nursing and the record system was essential. The outcome of change is reported in Chapter 7. No evaluation tool was developed owing to the nature of the study. The views of the nurse managers, sister tutors and ward sisters are described. Satisfaction of nurses and patients with systematic nursing and the observations of the researcher are also reported in Chapter 7.

It was hoped that on termination of the study the steering group would co-ordinate the activities of support groups and maintain the change that had been established. Any signs of discontinuance would be detected early and help would be provided whenever necessary. The last phase of the study took two months.

CHAPTER 5

PREPARATION FOR CHANGE

INTRODUCTION

The exploratory study presented here is an important part of the study. The plan for the preparations for the study is found in Appendix 6. This study was conducted to assess the existing nursing practice and to gain an understanding of the perceptions among nurses and patients of the new approach to nursing, that is systematic nursing. It also enabled the researcher to appreciate the administrative structure of the hospitals, staffing pattern, ward sisters' responsibilities, the pattern of organisation of work, decision making processes in patient care, methods of communication, interpersonal and intraprofessional relationships, communication and nurse-patient relationships, inservice education programme, ability and willingness of the hospitals to cope with the change and the change agent's motivation and resources. It was during this period that the researcher was able to establish positive professional relationships, mutual trust and credibility with the nurse leaders and professional staff.

The preparatory study included participant observation, unstructured interviews and informal discussions with nurses and patients which created a relaxed atmosphere for the researcher, nurses and patients. This also helped the researcher to gain a holistic view of ward nursing. She found this time most profitable as the atmosphere was relaxed and patients and nurses developed trust in her. She was therefore able to turn her attention to the incidents, interactions and work regardless of whoever was involved in the situation.

This preparatory work laid the foundation for individualised patient care and prepared the nurses for the oncoming change, that is

implementing systematic nursing. This included pre-testing of the tools for data collection. The process of change was partly demonstrated during this phase.

ACCESS TO THE HOSPITALS AND SCHOOLS OF NURSING

Permission was sought from the Medical Superintendents, Nursing Superintendents and the Director of Nursing Education of the selected hospitals. The two hospitals, the Narasapur Christian Hospital and the Christian Medical Centre, Pithapuram (hereafter referred to as N.C.H. and C.M.C.) were included in the study as a preparation for the ongoing change. In each case the School of Nursing also actively participated in the study.

Initial meetings were held with the administrative committees and also with the Nursing Superintendents and the Directors of Nursing Education (hereafter referred to as nurse managers). The researcher's plan for the preparatory study was discussed with each of these groups and a copy of the study was given to the Nursing Superintendents in both hospitals. The researcher was encouraged by the hospital administrative committees, as they expressed their willingness to review care and assured her of their co-operation and support.

The Nursing Superintendents in these two hospitals greatly assisted throughout the preparatory study. Six ward sisters, six general nurse-midwives, and four auxiliary nurse-midwives were interviewed (hereafter the general nurse-midwives and the auxiliary nurse-midwives will be referred to as trained nurses). Four doctors and one chaplain offered valuable information about nursing in the wards.

In each of these hospitals the Nursing Superintendents gave full orientation to the researcher regarding the entire hospital setting and all the hospital wards. The hospitals selected for the study have been described in the previous chapter. The researcher was introduced to the tutors, the departmental heads, ward sisters and the clinical supervisor in one hospital.

Administrative Structure of the Hospitals

The researcher was also supplied with information on the administrative structure of the hospitals and communication system. In both hospitals the Medical Superintendent is the highest authority. The administrative committee comprises the Medical Superintendent, Nursing Superintendent, Director of Nursing Education and Business Manager and a Senior Medical Officer in each hospital.

Nursing Service Administration

The Nursing Superintendent was the head of the Nursing Department. She handled the matters within the department in consultation with the Medical Superintendent, when important decisions had to be made. She had the freedom to run her department in the way she chose.

Administration of Schools of Nursing

In both hospitals the Schools were headed by the Director of Nursing Education. Although these were independent posts, in practice the Nursing Superintendent exercised some power on school matters.

Wards Selected - Orientation of Ward Staff and Nursing Staff

Following orientation, the ward sisters were informed by the Nursing Superintendents that the researcher would spend some time in each ward working with the nurses in order to introduce systematic nursing. Nothing had been mentioned about participant observation so that the nurses would work in the natural setting without modifying or altering their work pattern. The researcher requested the Nursing Superintendents not to indicate that participant observation was being used.* When the researcher went to each ward a detailed orientation of the ward was given by each ward sister. This included information such as the number of patients and their diagnoses, patient admission procedure, work allocation, record system, decision making system and communication system.

Two wards in N.C.H., one male medical and surgical ward and one female medical and surgical ward, and three wards in C.M.C., one male medical and surgical ward and two female medical and surgical wards, were involved in the preparatory study. The researcher was informed by both hospitals that it was a slack period because it was harvest time and most of the patients belonged to that working group.

Description of the Wards in N.C.H.

Male medical and surgical ward

Within the male medical and surgical ward of N.C.H. there were three bays, each with 12 beds. The bays were labelled medical, surgical and paediatrics respectively. There were four private rooms each with two beds, and veranda space for six beds.

* Note: The nurses were, however, told at the time of interviews by the researcher that participant observation had been carried out in the study wards.

Allocation of beds:

Medical and Surgical beds	38
Paediatric beds	12
Total Beds	50

Female medical and surgical ward

This was a 50-bedded rectangular type of ward with three main sections, labelled medical, surgical and tubectomy (gynaecological surgery). There were two private rooms each having two beds, and two rooms for patients with infectious conditions, each with two beds. In addition one room with two beds was allocated for isolation patients.

Allocation of beds:

Medical beds	20
Surgical beds	20
Tubectomy beds	10
Total Beds	50

Description of the Wards in C.M.C.

Male medical and surgical ward

The male medical and surgical ward is an 'H' shaped ward and has two sections. One section has seven rooms for general ward patients, each room having three beds. The other section has four rooms for private patients, either single or double rooms (sometimes female patients are also admitted into these rooms). These two sections are connected by the nurses station.

Allocation of beds:

Male Medical and Surgical beds	21
Private rooms for both male and female (medical and surgical and also gynaecological beds)	4
Total Beds	25

Female medical and surgical ward I

This was a mixed ward and had three sections. One section was for ophthalmological patients, and one section for surgical patients. The third section had five rooms, each having five beds. These five rooms were used for medical, surgical and gynaecological patients.

Allocation of beds:

Eye surgical beds	5
Surgical beds	5
Medical, surgical and gynaecological beds	25
Total Beds	35

Female medical and surgical ward II

This was an irregularly shaped ward of four sections, one for eye patients, one for medical patients, one for surgical patients and the fourth section was for private patients (combined medical, surgical and gynaecological). There were four rooms for private patients, each holding two beds.

Allocation of beds:

Eye surgical beds	5
Medical beds	14
Surgical beds	7
Medical, surgical and gynaecological beds	8
Total Beds	34

Although none of these wards was clearly marked, the nurses knew how the beds were allocated, so they knew which patients were being treated for medical, surgical, eye and gynaecological disorders.

Staffing Pattern of the Wards Selected

The staffing patterns of the wards at the time of study are outlined as follows. Each ward had a ward sister as nurse-in-charge, trained nurses, and general nursing students. In addition there were ward boys in male wards and ward aides in female wards respectively. Trained nurses with seniority were considered as ward sisters in N.C.H.

Table 5.1 describes the staffing pattern of two study wards in N.C.H. The number of nurses and their professional status is shown. The number of non-nursing personnel is also shown.

TABLE 5.1: Number of Staff in The Study Wards in N.C.H.

Professional Status	Male Med. and Surgical	Female Med. and Surgical
Ward Sister	1	1
Trained Nurses	7	6
General 3rd year	1	1
Nursing 2nd year (on vacation	-	-
Students 1st year	5	5
Ward boys/aides	5	6
TOTAL	19	19

In C.M.C. the ward sisters had either an extra qualification (diploma in ward management) or seniority (several years of experience as trained nurses). Table 5.2 describes the staffing pattern of three study wards, showed the number of nurses and their professional status and the number of non-nursing personnel.

Table 5.2: Number of Staff in the Study Wards in C.M.C.

Professional Status	Male Med. and Surgical	Female Med. and Surgical I	Female Med and Surgical II
Ward Sister	1	1	1
Trained Nurses	4	4	5
General 3rd year	1	1	1
Nursing 2nd year	1	1	1
Students 1st year	3	4	4
Ward boys/aides	1	2	2
Total	11	13	14

Staffing Pattern of the Schools of Nursing

The Director of Nursing Education planned the curriculum and the timetable for lectures and arranged clinical experience for students. There were four sister tutors in N.C.H. and four in C.M.C. All tutors had a post basic diploma or degree. Each school had a sister tutor who had majored in nursing education and administration, one public health tutor (who was a general nurse and midwife) specialised in community nursing at post-basic level, and one midwifery tutor (who was also a general nurse and midwife) specialised in teaching midwifery. There were four groups of students in each School of Nursing and also clerical staff.

Table 5.3: Staffing Pattern of the Two Schools of Nursing

Professional Status	N.C.H.	C.M.C.
Director of Nursing Education	1	1
Sister Tutors	3	4
Students:		
1st year General Nursing	11	10
2nd year General Nursing	10	13
3rd year General Nursing	11	11
Clerical Assistants	1	1

PARTICIPANT OBSERVATION

The researcher spent four weeks undertaking participant observation. The purpose of the study has been described earlier in this chapter. The researcher put on a uniform and worked at the bedside helping the nurses in the wards. During this time informal talks and

unstructured interviews with nurses were possible. An account of this in each hospital ward is described below.

The Organisation of Work Pattern

The ward routine

Officially the day started at 7 a.m. in N.C.H. There was no pattern of working hours for nurses. The unmarried nurses living in the hospital campus and the student nurses went on duty at 6 a.m. in order to take the report from the night nurses. The night nurses went off soon after giving the hand over report, and the nurses got the ward ready for the doctors' rounds at 7.30 a.m. The married nurses and nurses living with their families (outside the hospital campus) went on duty at 7 a.m. Then the nurses on duty from 6 a.m. gave the report to the ward sister and these other nurses. The researcher attended both 6 a.m. and 7 a.m. and also night reports. These took place in the nurses' station. There were no bedside reports. The hand over procedure included information about the patients' condition, medicines administered and investigations carried out or specimens sent to the laboratory.

Doctors made rounds between 07.30 - 8.00 hours. Sometimes the rounds took longer than indicated above. Before the rounds, patients' hygiene was attended to, beds were made, temperature, pulse and respiration and blood pressures were checked. All nurses in the ward attended the doctors' round. Following this, six o'clock duty nurses went for breakfast in turns, between 08.00 -09.00 hours, and on their return they performed the other tasks.

The duties were split duties; there was no shift system. Some nurses worked from 07.00 hours to 15.30 hours. Some nurses went off at 08.30 hours and returned to work at 12 noon. Some nurses went off at 12 noon and returned at 15.30 hours. There were no student nurses in the hospital in the evening after 15.30 hours. First year students came back to the wards at 17.30 hours for an hour to give patient care and then they went away. All the nurses worked an eight hour day (48 hour week). Night hand over report took place at 19.00 hours. Students were not posted on night duty until their third year of training.

The duty roster was made up by the Nursing Superintendent; the ward sister had nothing to do with it. If any change was needed the nurse concerned consulted the Nursing Superintendent directly and necessary alterations were made. No names were written on the duty roster, hence it was very difficult for a stranger to identify which nurse was on which duty. The nurses went by numbers; the nurse in charge became number 1, the next senior number 2 and so on.

C.M.C. differed in its ward administration in many ways. The ward sister was the key person in administering the ward. Ward sisters, staff nurses, auxiliary nurse midwives, ward aides and ward boys - each had their own job descriptions. (The researcher designed these 10 years ago when she worked as the Director of Nursing Services of this hospital.) The ward sister planned and organised ward work, worked out the duty schedule and exercised a supervisory role. Team nursing was practised. Patients were allocated to individual nurses in the team. The team consisted of a qualified senior nurse as a team leader, other trained nurses and students. The ward aides

and ward boys were involved in patient care, for example, pressure area care and changing the position of patients, besides performing their non-nursing functions. However they were not allowed to check the vital signs of patients such as TPR and BP. Patients' families also participated in giving care to their own family member.

The day started at 07.00 hours. The researcher attended both day and night reports in these three wards. The hand over procedure was the same in all wards. The hand over process took about 30 minutes, sometimes less and sometimes a little more, depending on the number of patients in the ward, type of patients, number of operations and work load.

All the nurses including student nurses received the report from the night nurse in the nurses' station. This was a special report on sick patients, post-operative patients and any emergencies that had taken place during the night. In one ward, the ward sister questioned the night nurse as to whether a post-operative patient had any abdominal distension. The ward sister briefly reviewed the preparation of a patient for barium X-ray. Students then went to their allocated work.

Then the night nurse, the ward sister and staff nurses went to receive a report at the bedside of each patient, clarifying the doubts about the patients' condition, and asking each patient how he/she was feeling. These were the important features of the bedside reports. However, the bedside reports followed a medical model. In one ward the night nurse did not say much about the patients except repeating patients' names and diagnoses. The ward sister interrupted at times in order to clarify any doubts. Bedside reports in the male

medical and surgical ward followed the same pattern. There were questions about the patients' conditions and investigations, and feedback between day and night nurses.

Then the sister made a quick round and checked all patients' charts. Nurses were busy with their patients, making beds, attending to hygiene, checking TPR and BP. The ward was ready for doctors' rounds at 08.00 hours. These took place between 08.00 - 09.00 hours. The ward sister and the senior nurse (next to ward sister) attended the rounds. The nurses went for coffee break in turns, between 09.00-10.00 hours. They had their lunch break between 12.30-13.30 hours. Some nurses went off at 09.00 hours and returned to the ward at 13.00 hours. Some went off at 13.00 hours and returned at 15.00 hours. All the nurses including students followed the same working pattern. Students had their lectures between 09.00-11.00 hours in the mornings or between 15.00-17.00 hours in the evenings. The nurses appeared to show an interest in talking and listening to the patients and the relatives as they worked at the bedside. All the nurses worked an 8-hour day and a 48-hour week. All these wards worked on a split duty system, that is 07.00 hours - 09.00 hours and 13.00-17.00 hours and 07.00-13.00 hours and 17.00 - 19.00 hours.

The ward sister planned the duty roster for her ward every week stating the name of the nurse, professional status and the duty schedule. A copy of it was sent to the Nursing Superintendent. Necessary alterations were made whenever necessary. The ward sister was the mediator in the process of communication. She had the freedom to try out new methods in nursing, in consultation with the Nursing Superintendent. Nurses and other non-nursing personnel in

the ward were accountable to the ward sister for their work. The ward sister planned and organised the day's work.

Identification of patients

There were no bed numbers or patient labels anywhere in the wards of N.C.H. This was rather confusing. Nurses started counting beds from one end as number 1, 2, 3 and so on. Since no bed numbers were written one did not really know where to start counting. Nurses in the wards seemed to have a common understanding which was bed number 1 and which bed number 2 and so did the doctors.

In C.M.C. there was no problem in identifying the patients as all the patients in the wards had their bed numbers clearly marked. Most of the nurses knew their patients by their names, and also knew the patients' diagnoses, medical history and treatment.

Nursing practice

Nursing was mainly task-oriented in N.C.H. One nurse took all the temperatures, the other gave all medicines and so on. A typical hierarchical pattern of nursing existed. Senior nurses performed more senior tasks like injections and medicines, and junior nurses performed tasks like baths, mouth washes and so on. Here again, no one decided on the tasks, the nurses chose their tasks according to their seniority.

Nursing practice in C.M.C. hospital wards was neither fully task-oriented nor patient-oriented. Patients were allocated to individual nurses in the team, but task allocation still occurred.

Clinical supervision of the student nurses

The male medical and surgical ward in N.C.H. had a clinical supervisor. The researcher observed the way the clinical supervisor allocated patients to students. It was not patient allocation but allocation of beds and tasks, for example, a first year student was assigned to give back care to beds one to seven. The tasks were changed every day. The emphasis was not on individual patients but was on tasks. (Earlier the researcher had been informed by the Nursing Superintendent that the clinical supervisor was practising patient allocation). Tutors also helped with clinical supervision.

Tutors were responsible for clinical supervision in C.M.C., but they were seldom seen in the wards, owing to their busy teaching schedule and other responsibilities in the school.

UNSTRUCTURED INTERVIEWS

Two ward sisters, three trained nurses and three general nursing students in N.C.H., and three ward sisters, six trained nurses and three general nurse students in C.M.C. were interviewed. Open ended questions were used to allow free answers and to enable the individuals questioned to express themselves spontaneously either in English or in their own language. Questions were related to: 1) the ward environment; 2) sisters' responsibilities and organisation of work; 3) nurses' perceptions of the existing pattern of nursing and 4) their perceptions about the new approach in nursing, that is systematic nursing. By this time the nurses had been taught about systematic nursing.

Interviews with the Ward Sisters in N.C.H.

The ward sisters were interviewed in the nurses' station as there were no separate offices for them. The interviews were informal and lasted for approximately 40 minutes. The researcher asked the sister to give an overall picture of the ward environment.

The ward sister explained to the researcher about the ward set-up, categorisation of patients, ward supplies and equipment and physical facilities. The sister also explained that patients in the hospital had no facilities for catering. Each patient was allowed to have a family member or a relative with her/him. Patients' families participated in patient care. Rooms were provided where they cooked their own food.

The ward sister further explained about the admission procedure. Patients were sent from the out-patient department to the ward. A student nurse or a ward boy gave an allocated bed to the patient and checked his TPR. Later on one of the staff nurses attended to the patient.

The ward sister was asked to explain her duties. In response to this she said:

> "I come every morning at 7 a.m., take the report from the nurses who came at 6 a.m.; keep the ward clean and tidy for doctors' rounds; follow the rounds and write down the medicines and treatments ordered in the rounds book; see that patients are comfortable and everything is done for them. Specimens are sent, investigations are done, medicines and injections are given."

The researcher asked the sister to explain the way she allocates the work in the ward. She said:

> "The nurses know it themselves. I don't have to assign any work to anybody. We go by numbers. It is understood by all nurses that I am No. 1, the next senior No. 2 and so on. The nurses are very good. They do everything for the patients. I don't have to tell them."

The researcher asked the ward sister whether there was a written allocation of duties. The ward sister said that they didn't have a written allocation anywhere in the hospital. She further added:

> "We don't have to write. All nurses attend to all patients. We all attend the doctors' rounds. Doctors like it that way. We all work together. One gives injections, one gives medicines, one does the dressings and so on. Students take temperatures, give baths, mouth care, morning care, evening care, back care etc."

The researcher asked the ward sister whether she supervised the work. The ward sister said:

> "I know it from sight, I don't have to supervise them. Nursing Superintendent makes the duty roster. If any change is needed we must go and request her to do so. The clinical supervisor supervises students' work. I don't have to worry about these things."

The day in a hospital ward could be summarised like this:

06.00 hours	-	Hand over report from night staff
06.15 - 07.00 hours	-	Bed making, patient care, TPR and BP
07.00 hours	-	Hand over to sister
07.30 hours	-	Doctors' rounds
08.00 - 09.00 hours	-	Breakfast
09.00 - 12 noon	-	Medicines, baths, injections and treatments
12 - 12.30 hours	-	Lunch break
12.30 - 15.30 hours	-	BD medicines, injections and treatments
15.30 hours	-	Hand over

16.00 hours - Doctors' rounds

16.30 hours - Medicine round

17.00 - 19.00 hours - Evening care, back care and mouth care

19.00 hours - Hand over.

The researcher wanted to know what records were kept in the ward. The ward sister brought forth a number of books and sheets and explained what these were meant for. The following is the list of books and forms.

1. TPR book (temperature, pulse and respiration)
2. bath book
3. rounds book
4. procedures book
5. linen account book
6. syringes account book
7. medicine book
8. health education book
9. day report book
10. night report book
11. case sheet - a blank paper to be filled in by doctor after medical assessment
12. additional case sheet - for doctors' notes
13. TPR chart - to record BD temperature, four-hourly and six-hourly medicines and antibiotics were also recorded on it
14. four-hourly temperature chart - separate sheet if four-hourly temperature has to be taken

15. nurses' record - no column for nurses' notes; intravenous infusion, intake/output were recorded in it and this chart was used for patients who were receiving intravenous fluids
16. operation record - for patients undergoing surgery.

Admission notes and patients' complaints were rarely recorded in the treatment column of the nurses' record. Nursing care given to patients and progress of patients were not recorded by the nurses. Doctors recorded the patients' progress.

The researcher wanted to get the opinion of the ward sister about various aspects of written documentation, such as nurses' recording of the care given to patients, admission notes for all patients, patients' complaints, nursing care and subsequent progress. The ward sister felt that it was a good idea but said that they did not have time to do all that.

The researcher wanted to know whether nurses spent some time talking to patients in order to understand their problems. To this the ward sister answered:

> "We don't have time to do all that. We quickly finish our work. When all the work is done, we are happy."

The researcher put another question as to whether patients expected the nurses to spend some time at the bedside, either when they worked at the bedside or otherwise. The ward sister's response was:

> "Patients know that we are always busy and we don't have time to talk to them. We do everything for them, we give medicines, injections, do the dressings, check their BP, TPR, give bed bath or room bath. When everything is done, we are happy and they are happy. We have been doing like this for many years. We haven't come across any problems."

The researcher then explored what the ward sister thought about the nurses in her ward spending a little more time with the patients, knowing them by their names, history and problems in order to understand each patient as an individual and give the care that he or she needed. The ward sister replied:

> "It sounds good. Right now my ward nurses really don't spend any time with patients, talking to them and understanding their problems. First of all we don't have time owing to the shortage of nurses. Even if we have time, we are not used to this kind of approach to patients and so nurses tend to remain in nurses' station rather than at bedside. If we divide patients for nurses we may have problems with doctors. Doctors expect all nurses to go with them when they make rounds. They expect all nurses to know about all patients in the ward. One sister tutor tried out patient allocation some years ago but she did not succeed. We had a lot of problems. When doctors wanted to know about patients, nurses said that the particular patients were not under her care. Doctors got annoyed with that. That did not work out."

The description of the female medical and surgical ward environment and organisation pattern was almost the same as that of the male medical and surgical ward. The ward sister's responsibilities were very similar to those of the ward sister in the male medical and surgical ward. The ward sister seemed to have fixed ideas about the new approach in nursing. The following are some statements made by this ward sister about allocating patients to nurses:

> "Nurses will not know about all patients in the ward.
>
> When doctors question about patients, nurses say that they don't know about patients other than those who are allocated to them.
>
> Some times there are only two staff nurses on duty. Patient allocation becomes a problem.
>
> When the ward is busy, patient allocation cannot be practised.

> All students go off at the same time. They don't have relief duties, hence it becomes a problem.
>
> It is good for students' learning, but very difficult to practise.
>
> When patient allocation was tried in the male ward everything became chaotic. It is very difficult to follow."

In response to the comments made by this particular ward sister the researcher asked whether patient allocation had been tried in her ward. She said it had not been tried in her ward but she gathered from information from the nurses on a male ward that an attempt had been made to introduce patient allocation several years before, without success.

Interviews with the Ward Sisters in C.M.C.

The interviews took place in the ward sisters' office in a relaxed manner. Each lasted approximately 40-45 minutes. The researcher asked the ward sisters in C.M.C. to explain how they planned to organise the day and their responsibilities. All three of them considered ward management as their primary responsibility and viewed it as a means of improving patient care. They gave the following account of their day:

07.00-07.30 hours	Hand over from night nurses
	Brief clinical teaching
	Patient allocation
	Allocation of work for non-nursing personnnel
07.30-08.00 hours	Overseeing patients' charts
	Ward sisters' rounds

08.00-09.00 hours	Doctors' rounds Allocating stat. orders, treatments and investigations
09.00-09.30 hours	Coffee break
09.30-10.00 hours	Checking charts, renewing orders, copying new orders, arranging for patients' discharge (sometimes takes longer)
10.00-11.00 hours	Supervision of students
11.00-12 noon	Supervision of non-nursing personnel. Inventory of equipment, indent for supplies
12 noon	Lunch break
16.00 hours	Hand over and allocation of work Ward sisters' rounds
17.00 hours	Arranging for a health talk
18.00 hours	Checking charts, writing reports
19.00 hours	Hand over to night nurses.

The researcher asked the ward sisters specific questions in order to obtain more information on the admission procedure and methods of work allocation. Patients were referred from the outpatient department to the ward. The sister or the senior staff nurse allocated the patient to a student or to an aide. The patient was allocated a bed, TPR was checked, and on admission a bath was given and admission notes were written by whoever admitted the patient. The nurses who were responsible for patient care shared the work among themselves. No nursing assessment or nursing care plans were written. Each patient was allowed to have a family member with him throughout the

day. The family member cooked food for the patient and helped with care.

The ward sister explained that she was responsible for prescribing the work and this was written on a chart and hung in the nurses' station so that it was available for all nurses. This chart was named the 'Patient Care Assignment Chart'. Team nursing was in practice. The nurses were divided into teams and patients were allocated to individual nurses, one team working with medical patients and the other with surgical patients. Patient care assignment was reviewed once in two weeks, day to day adjustments were made depending on nurses' days off and off duty. The team leaders worked opposite duties in order to cover the span of duty. The ward sister explained that the idea behind this method was to make them understand the concept of 'patient care'. Each patient was to be looked after by two nurses. A junior student did not give injections nor did she do more complex procedures; so she worked with a trained nurse, who did the complicated procedures and the student did the simple procedures. Together they did everything for their patients, and the nurses knew a little more about their patients. Besides this, specific duties were assigned to each nurse, for example, sending medicine requisitions, requisitions to general stores and keeping the treatment room clean.

The researcher asked the ward sister whether the method had been workable. To this the sister replied:

> "I try my best to see that it is practised. It is not completely practised. It is again task allocation within a patient care assignment but the nurses know a little more about their patients' background, condition and progress. I follow it when the student

> nurses are in the wards. If I have only one or two staff nurses on duty I find it difficult. If there are too many admissions or if a patient becomes serious or if I have a number of pre-operative patients, I am unable to follow it. In such cases my concern is to get the work done and I go back to task allocation."

The researcher had observed this happening especially on operation days. On one occasion the researcher witnessed three nurses preparing a patient for operation. One nurse went with the temperature tray, another nurse with blood pressure apparatus and another with pre-operative medication.

The researcher questioned the ward sisters as to whether it would be possible to practice patient allocation if they had more nurses. One of the ward sisters said:

> "You know we have too many responsibilities. Student supervision is time demanding. Clinical teaching, health education, planning time schedule, checking charts, everything takes time. Even without additional staff we can practice it provided that tutors give a helping hand."

Another sister said:

> "Some of the nurses don't spend time at the bedside, especially student nurses. These days we hear that they are not meant for work and they are there for their experience. So if they find time they go into an empty ward and chat with each other or they all get together in the treatment room and waste their time. When they work at the bedside they do it in a hurry to finish quickly and get away to a lecture."

The researcher enquired whether supervision made any difference. The sister said:

> "It did - a lot of difference. In our training, tutors used to be after us in the wards and we learned the work better. We knew more about our patients and we learned better. The tutor advised and supervised our procedures. Now these students are left in the ward on their own. Sometimes they don't know what to do. I may be busy with doctors' rounds. They are lost."

The researcher asked the sisters about their views on the new problem-solving approach, individualised patient care, or systematic nursing as it is known. Since they needed a little explanation of this, the researcher briefly explained this new approach. One sister was quite excited about it; she wanted to try it out provided there was someone to help her. She said:

> "It is better for patients and good for students' learning. We can understand patients' problems and help them and care for them meaningfully."

This sister had worked before as a trained nurse in a very big hospital where patient allocation was practised. She said that she would be quite happy to co-operate and help the researcher. Nursing assessment and nursing care plans were new to her since systematic nursing had not been implemented in Indian hospitals thus far. Another sister also showed interest in this new approach and used every opportunity to collect histories from patients' and to understand their problems.

> "We would like to try out the new method. We can learn more about the patients' background and understand their problems and care for them. But we have problems with doctors and other health personnel. If doctors want to know about a patient, if we reply on the telephone they are not satisfied. They expect us to go to their residence with patients' charts. Some of the doctors don't write patients' discharge notes in the ward. They want us to go with patients' charts to their residence. A ward sister or a trained nurse must go and stay in out-patient department until the doctor completes writing discharge notes. It is such a waste of our time. When the laboratory technician comes to take blood samples he expects the nurse to go with him and show him all the patients. Patient's name, bed number, hospital number are clearly written on the requisition, even then he expects the nurse to go with him. We have to do a lot of things like this. This time could be spent with the patients."

The researcher asked the ward sister to explain about the record system. The ward sister showed all the records that they used in the ward. A patient's chart had the following records:

1. doctors' order sheet
2. progress sheet
3. temperature, pulse, respiration and BP chart
4. laboratory investigation sheet
5. nurses' record - this has columns for medication, diet, urine, bowel movement and nurses' remarks
6. intake, output chart for post-operative patients, patients who are on intravenous fluids, cardiac patients, renal failure patients, other patients for whom it is necessary
7. bill chart
8. operation chart
9. consent form for surgery.

In addition to the above the following items were present in all wards.

- TPR books
- medicine order sheets instead of Kardex
- treatment sheet
- standard pre-operative care
- standard post-operative care
- typed notes on important investigations and preparation of patients were framed and made available to nurses for reference.

Admission notes were written by the nurse who admitted the patient. Whether the patient came walking or was brought in a wheelchair or on a trolley, patient's condition and complaints, TPR and BP were recorded. If any 'stat.' medicines were given or any treatment was done these too were recorded and the nurse signed at the end of the admission notes.

During the day whenever something was done for the patient, for example a dressing or an injection, it was recorded immediately. If there were any complaints during the day, or if the patient passed urine or his bowels moved, these events were recorded. At the end of the day a statement about the patient's condition was also recorded. The same thing was done by the night nurses. The ward sister checked all the charts once in the morning, after doctors' rounds, and once in the evening before she wrote the day report. If anything had not been done she questioned the individual nurse and asked for an explanation.

Informal Talks with the Trained Nurses

The researcher talked to three trained nurses in N.C.H. wards. The researcher asked one of the nurses whether she found time to talk to patients in her work. The nurse replied:

> "Yes, I find time in the afternoons and nights. It is very difficult to spend time with patients in the morning. We are busy with rounds. We do everything for patients. In the absence of ward sister I have to manage the ward. I have to send patients for operations, give medicines and see that all the treatments are done. We have to see that the toilets are clean, otherwise the Nursing Superintendent will come and check on that. I want to do everything without being reminded."

One nurse said:

> "I am happy for what I am doing. It is a good idea to know more about patients. We can understand them better and will be able to help them better. I will try to work that way whenever I find time."

Another nurse said amusingly:

> "We don't know all patients' names. We refer to them by their bed numbers. We too don't have our names written anywhere. We go by numbers. We work spontaneously. If I go with medicine trolley, the other nurse does the dressing. It is a common understanding between nurses. When one finishes her work, she helps the other nurses. We work together co-operating and finish our work."

Because of this conversation, the researcher went to the ward and found that indeed there was no way to identify the patient by the bed number as what would be bed Number 1 to one nurse, might not be to another nurse.

The researcher talked to six trained nurses in C.M.C. All of them said that their primary responsibility was patient care. Other responsibilities like relieving the ward sister, checking the charts, and participating in health teaching were secondary. They felt that patient allocation was not fully practised owing to the shortage of staff. They had learned about comprehensive patient care, but it was not practised. No attempt had been made to assess patients, identify their problems and plan care. Systematic nursing was new to them. They felt that there was not enough motivation and supervision of students. They expressed their willingness to participate in trying out the new approach and appeared to be eager about it.

Informal Talks with the General Nursing Students

In N.C.H. the researcher talked to three third year general nursing students about their perceptions of nursing and about patient

allocation and the concept of individualised patient care. Their perceptions of nursing sounded very similar, for example, one said that:

> "Nursing is serving the sick, it is an art, and it is a profession."

In the first year of their training they said they made beds, gave bed baths and patient care. In the second year of their training they did technical procedures like administering medicines and injections.

One student said that in her first year she was assigned to a group of patients but in the third year it was complete task allocation owing to the shortage of nurses. In conversation she indicated that she preferred patient allocation.

Another student said that she had written care studies in her second year. Then she collected patients' personal history, medical history and social history. This student said that this helped her to understand the patients better and she was able to plan and give care according to patients' individual needs. She felt that it was a better approach to patient care because she knew more about her patients and felt that she gave better care to her patients. She also said that she had more satisfaction in caring for the patients.

The other student said that it was good to follow patient allocation but she thought job allocation was advantageous as jobs could be carried out by any nurse in the absence of the other nurses.

The researcher spoke to three general nursing students in C.M.C. They said that they were expected to practise patient allocation, but it was not always possible. They found patient allocation useful and

educative. They said they took patients' history some times but not always. The senior students took the patients' history when they did their care studies. They said that it was rewarding and they learned more. They planned care for the patients whom they selected for care study.

Informal Talks with the Doctors

Since the ward sister in N.C.H. said that they would have problems with doctors in practising patient allocation and spending time with patients finding out their problems, the researcher decided to talk to two doctors, and talked with them individually. They both seemed to have similar impressions about existing nursing practice. One doctor said:

> "The nursing on the whole is very good. Nurses give dedicated service, the importance of nursing care is very much stressed. There may be some defects but that has to do with nursing administration. The set-up is like that from the beginning. As far as students are concerned, they are assigned to sections or units. Patient allocation can be done."

The other doctor said:

> "It is good to know the patient as an individual. The holistic approach is certainly a better approach. Nursing administration in this hospital needs a change. The record system has to be improved. There is no harm in trying out a new system. It is good to improve nursing care."

The researcher also talked to two doctors in C.M.C. to find out their perceptions about individualised patient care. They seemed to appreciate the idea and encouraged the researcher to go ahead with it and said that they would be happy if the new approach came into practice. They further added that the nurse leaders needed to be motivated and there should be better supervision in the hospital wards.

Informal Talk with the Clinical Supervisor

The researcher had an informal talk with the clinical supervisor in the male medical and surgical ward in N.C.H. as the Nursing Superintendent and the ward sister informed her that she practised patient allocation for students. The clinical supervisor said that she was taught about systematic nursing in the UK. She wanted to start with it but found language a barrier and nurses did not seem to understand what she intended to do. However, the clinical supervisor said that she allotted patients to the students mainly to help them with their procedures. She further assured her help and co-operation in implementing systematic nursing.

The researcher obtained information on the following factors by means of observation and informal talks.

Communication

There existed a direct communication system between the nurses and the Nursing Superintendent in N.C.H. The ward sister was not a mediator in this set up. There was good communication between nurses, nurses and doctors and nurses and the other professionals. To the researcher it appeared that communication with patients was limited. The ward sister and the nurses maintained good relationships among themselves and with the doctors and other professionals. There was a friendly atmosphere. It appeared that the nurse-patient relationships and interactions seemed to be kept to a minimum. To the researcher it seemed that the nurses were so busy with the tasks that they hardly found time to talk with their patients. It appeared that they only answered patients' questions if they had any.

In C.M.C. the ward sister appeared to be the key person as far as the ward administration was concerned. There was no direct communication system between the Nursing Superintendent and the other nurses unless in exceptional cases. The ward sister organised work and communicated well. Both written and verbal communication were practised. Any problems such as shortage of nurses, absenteeism, or matters concerning discipline were reported to the Nursing Superintendent by the ward sister. There seemed to be some amount of openness, communication and interaction between patients and nurses and between nurses and other health personnel.

The ward sister was the important person in making decisions in relation to nursing care. Nurses also had freedom to decide patient care in consultation with the sister or the senior trained nurse.

Inservice Education

There was no inservice education programme in N.C.H. Doctors voluntarily did some clinical teaching if there was an interesting patient. There were no ward sisters' meetings or conferences or meetings with the Nursing Superintendent.

The C.M.C. had planned inservice education programmes for all trained nurses. They usually had one meeting a month. Sister tutors actively participated in presenting a paper or demonstrating a new procedure or technique. Other non-nursing personnel like ward aides/ ward boys and sweepers also had inservice education programmes.

There was a joint monthly meeting of ward sisters and sister tutors along with the nurse managers. Here they discussed problems arising in relation to patient care, students' clinical experience,

clinical teaching, any matters concerning discipline, student evaluation, staff evaluation and any other matters of importance.

The Sister Tutors

Except one tutor in each School of Nursing, all of them had had some exposure to the principles of the problem-solving approach but they had not seen it in practice. It was because of this that patient allocation had been tried in C.M.C. The tutors in N.C.H. said that they could not do anything about it because of the type of nursing administration which was so traditional and centralised with all powers vested in the Nursing Superintendent. They had no freedom to test out new methods. Since the Nursing Superintendent herself was interested in improving patient care, they said they would be happy to co-operate.

All tutors said that they helped students do some case presentations during the second year and third year of their training. This was a requirement for the student to appear for the third year general nursing examination. Each student had to do five care studies, two medical, two surgical and one paediatrics. The students collected the patients' history and described day-to-day nursing care given to the patients for five days. Students were not taught how to do nursing assessments or write nursing care plans. They all admitted that systematic nursing was something new to them. Care studies followed a medical model. Individualised patient care and a problem-solving approach were not stressed.

The tutors appeared to be eager to know more about systematic nursing. The researcher was accepted by them as a colleague and so

there was personal and professional freedom to exchange knowledge and views about trying out this new approach in nursing. Since there was common interest and inquisitiveness, the researcher was able to establish positive professional relationships, mutual trust and credibility. The willingness of the tutors to try out the new method and co-operate with the project motivated the researcher to proceed.

Conclusions Regarding Professionals

Participant observation and interviews with the nurses in N.C.H. confirmed that nursing was highly task-oriented. The ward sisters did not understand the concept of individualised patient care and the problem-solving approach in nursing practice. They were so very used to traditional, task-oriented nursing that it hindered them from even thinking of a new approach in nursing. New methods in nursing were associated with the threat to change the old traditional model. The nurses on the whole did not seem to understand the concept of individualised patient care. Tasks seemed to be more important than patients. Doctors' rounds seemed to gain priority over any other activity in the ward.

The commonly expressed difficulties were shortage of staff, lack of time and too many duties. As far as staffing was concerned, it seemed to be adequate according to the staffing pattern recommended by the Indian Nursing Council (1978). The recommended nurse patient ratio was one nurse for every three patients (1:3). In these wards, the nurse-patient ratio, including students, was about 1:4.

Shortage of time and the nature of the workload could be factors associated with lack of planning and organisation of work. No one

seemed to know to whom they were responsible and for what they were responsible. There was no work allocation and the nurses did not give an account of work done for that day. Every nurse chose a task according to her seniority. They moved from one task to another and found no time to talk to patients.

The ward aides, ward boys and patients' families also helped with patient care, besides doing the non-nursing jobs like fetching linen and supplies. They also took patients to the X-ray room, the laboratory or to the operation theatre. They checked TPR, but not BP, gave bedpans and assisted with bathroom baths. Their work was not being supervised. The ward sister enquired once in a while whether everything was done. None of the nurses had job descriptions. The ward sisters did not seem to conceptualise their supervisory role at all. The sisters did not seem to understand the value of a proper record system.

This posed a real problem to the researcher. She felt the need to work in co-operation with the nurses and educate them slowly, instilling in their minds this idea of individualised patient care. The researcher working along with nurses demonstrated this approach for 10 weeks. Meanwhile she had several informal talks with the nurse managers, helped them and offered feedback on matters concerning patient care.

As a result of the researcher working along with the nurses in the wards and the efforts that she made in discussing with the nurse managers, the researcher noticed a change in the attitude of the sisters and nurses over a period of time. They welcomed new ideas and discussions with the researcher and their approach to patients

started changing slowly. This was an encouragement to the researcher.

Team nursing was in practice in C.M.C. The nursing practice was neither fully patient-orientated nor task-orientated. They appeared to be in a transition period and felt the need for someone at a higher level to guide them in the actual practice of patient allocation.

The ward sisters were able to conceptualise that patient allocation was a better approach to patient care but they seemed to be frustrated as they were unable to implement it fully. Trained nurses and students also were able to perceive that patient allocation would give greater satisfaction to nurses and patients. They considered the new approach, that is systematic nursing, as a challenge to implement patient allocation fully. The views of the nurse managers, and other nurses and doctors towards the new approach appeared favourable to the planned change. They understood the importance of documenting care given to patients; however, the records needed to be fully developed.

The ward sisters felt that there was a shortage of trained nurses. This would appear not to be the case when one compared the existing nurse patient ratio with the standard set by the Indian Nursing Council.

Lack of clinical supervision, motivation and wastage of time were the matters discussed with the nurse managers and the necessary action was taken. (This happened when the researcher had informal feedback meetings with the nurse managers.) In order to allow more

time during the peak working hours, certain changes were made in the duty roster.

The positive attitudes of the entire nursing staff towards implementing systematic nursing, and their willingness and ability to change, had been a great encouragement to the researcher to proceed with the next step of her study.

Interviews with the Patients in N.C.H.

Sixteen patients were interviewed in N.C.H. Of the sixteen, ten patients were in the male medical and surgical wards and six patients in the female medical, surgical and gynaecological wards.

Patients in this hospital spoke very highly about nursing care. One patient said:

> "Nurses do everything for me. They give me injections, medicines, bath and so on. They enquire about my wellbeing, find out my difficulties. If I need their help they are available. They do things according to their time schedule. I tell my complaints to doctors and nurses. Sometimes doctors are not available. I tell the nurses. They in turn tell the doctors. There is a difference between government hospitals and mission hospitals. Nurses in mission hospitals give better nursing care. That's why I would like to go to a mission hospital."

The researcher enquired whether this patient would like his history taken, in order to understand the problems and plan care accordingly. The patient said he had not heard about such a thing before. The researcher spent some time talking to him and discussing his social, medical history and health problems. She discussed his diet, importance of output and continuing with medicine. Amazingly the patient came out with his whole history and shared other problems, such as job problems and financial problems, and thanked

the researcher for spending time and understanding his problem.

Another patient had been in the hospital for two months. He had a whole lot of problems - housing problems, financial problems and health problems. He said that doctors and nurses were very kind to him. Upon enquiring about the type of nursing he was receiving, the patient described typical task-oriented nursing. He said he had been confined to bed for the past two months. His wife and nurses helped to meet his needs. The researcher asked the patient about his dietary habits. The patient said that he would not eat egg or fish for fear that it might delay wound healing. This was his ignorance and superstition and no nurse had checked on his diet. The researcher explained to the patient that a high protein diet was necessary for wound healing, and that there was no need for him to fear eating egg and fish. The researcher asked him whether he would like the nurses to talk to him and spend a little more time understanding his problems and explaining more about their care. The patient said he would be quite happy if the nurses did that.

Both female and male patients described a typical task-oriented nursing practice. They hardly knew any difference between task nursing and individualised patient care. The majority of them said that they went to mission hospitals because the medical and nursing care was good.

It was very difficult for the patients in this hospital to conceptualise individualised patient care and a holistic approach since they did not know the difference between task nursing and the new approach. Their perception of nursing was that senior nurses did important things and junior nurses did baths, bed making and other

small procedures. Upon demonstrating the new approach it seemed that patients might like nurses to talk to them and find out their problems and discuss their care with them.

From the time the researcher went to the hospital wards, the expectations of the patients about nursing care started changing. There was a change in nurses' approach to patients. Nurses showed interest by spending a little more time with the patients.

Interviews with the Patients in C.M.C.

Sixteen patients were interviewed in this hospital, four patients in male medical and surgical wards and twelve patients in female medical, surgical and gynaecological wards.

Some of the patients felt quite happy with the nursing care given to them. They said nursing care in this particular hospital was good. Comparing it with the government hospitals, they preferred this hospital because it had a good name for patient care. Some of the responses were:

> "Nursing care is very good in this hospital, nurses do everything for us. They are kind and understanding. Chaplain and Bible woman (lady preacher) come round and pray for us."

The researcher has also learned that patients' relatives gathered in the hospital chapel every morning during doctors' round time. The chaplain or woman preacher talked to them.

However, unlike the other hospital, patients here seemed to have different opinions about nursing practice. Examples of a few responses are given below. The researcher asked one of the patients whether she was happy with what the nurses did, or if there was any-

thing else that she would like the nurses to do. The patient expressed her views like this:

> "Nurses do my dressing and give medicine. I appreciate all that they do, but one thing, I will be happy if nurses give me some hot water for a bath. If nurses talk a little more to us and find out what we need, that will really make a difference. I am happy that at least you came and chatted to me."

Another patient said:

> "Nurses do what they ought to do. Apart from that they don't listen to us. We would like them to talk to us and find out our difficulties. Whether we want a bath or hair wash or something else. They don't tell us what we should eat but they record what we have eaten."

Two other patients talked in the same manner. One patient had superstitions about having a bath after the operation. The stitches had been removed and the wound had healed, but she was afraid that the wound might become infected if she had a bath. The patient said that nurses did not advise her to have a bathroom bath.

Since team nursing and also partly patient allocation were practised in this hospital, the perception among patients of their care seemed to be different. Their expectations were higher. They wanted nurses to talk to them and find out their problems. There seemed to be an increased awareness of their care. They were able to perceive that nursing is more than performing the tasks. Since the patients already expressed that finding out their problems was a better approach, the researcher did not feel the need to further investigate their perceptions. Some of the patients's relatives expressed similar views.

PRE-TESTING

Pre-testing included three areas:

1. Pre-testing of the teaching programme on systematic nursing
2. Pre-testing of the Nursing Assessment Forms
3. Pre-testing of the Nursing Care Plan.

The objectives were:

- to assess the practicability of the teaching programme in preparing nurses adequately to implement systematic nursing
- to assess the practicability and suitability of data-collecting tools, Nursing Assessment Forms and Nursing Care Plan, as designed to introduce systematic nursing
- to assess the usefulness, practicability and suitability of Nursing Care Plans in planning systematic nursing care. See Appendix 4 for the objectives of the course for implementing systematic nursing.

Pre-testing of the Teaching Programme

Pre-testing of the teaching programme was done with nurse tutors and ward sisters in the two hospitals over a period of eight weeks. Originally, the researcher planned to test it only on nurse tutors. However, discussion with the Nursing Superintendents and the Directors of Nursing Education suggested that it was essential to include ward sisters at this stage too, as they are the key people who direct nurses in planning care for the patients. It would also prepare them for the oncoming change and make them feel that they were involved in the change process from the very beginning.

A copy of the course outline was given to the Nursing Superintendents in each hospital. They showed their interest by getting extra copies made for their teaching staff. A timetable was drawn up by the Nursing Superintendents, displayed on the notice boards and communicated to all nurses concerned. Each session lasted two hours in order to include practical participation. Eighteen hours of teaching was given in each hospital. The Nursing Superintendents and the Directors of Nursing Education also attended the lectures and participated in practical sessions. A total of 24 members participated in the teaching programme - 11 nurses from N.C.H., and 13 nurses from C.M.C.

A modular form of teaching was employed. Lectures, discussion, case presentations, role playing, simulation and group sessions were the forms of teaching and learning employed. An overhead projector and slide projector were used. The blackboard was very much used. Besides this, the researcher drew posters and charts which created interest and caught the attention of the group (see Figure 5.1). Exchange of ideas and interesting discussions were the important features. The hand-outs on systematic nursing, the Nursing Assessment Forms and Nursing Care Plans were printed and made available for the sessions.

Nursing assessment

Nursing assessment was done in two hospitals. The researcher prepared two ward sisters in each hospital to do this. The ward sisters interviewed their patients on the day of admission and requested them to be present for the nursing assessment in front of

the group. Nursing assessment was done on a medical patient in N.C.H. The ward sister saw the patient on the day of admission and explained to him the purpose of assessment and requested him to be present for assessment the next day. The patient consented to this and the assessment was done in front of the group (see Figure 5.2). In C.M.C., the patient was scheduled for operation on the day of the assessment session. Therefore, the ward sister assessed this patient in her ward. Within a short time, she prepared one of the fourth year students to act as a patient. The information was factual but the student role-played for the patient. In both hospitals following nursing assessment the ward sisters presented their patients giving an account of the patient's personal, medical and social history and information related to their activities of daily living. This enabled the nurses to identify patients' problems.

These were very interesting sessions. Nursing assessment sessions were followed by lively discussions. The interview in both sessions took about nine minutes. The following points were discussed after the interviews:

- whether the nurse was pleasant
- whether she maintained a good nurse-patient relationship
- whether the interview was natural, structured or highly structured
- whether it has yielded the data that it should
- whether it was interesting
- whether it was useful
- whether it was relevant
- whether any important information had been omitted.

Figure 5.1 Systematic nursing – teaching session

Figure 5.2 Nursing assessment – practical session

Planning

In order to teach this phase the researcher selected two other ward sisters from each hospital. In N.C.H., the sister tutors, ward sisters and the nurse managers wanted to follow up the same patient who had been assessed in the previous session. After the discussion on planning, the participants were divided into three small groups, three members in each group. A copy of the patient's case history was presented to each group. Each group worked out the care plan with great interest and enthusiasm. At the end of the 40-minute practical session there was a lively discussion. The care plans written by the three groups had been similar rather than different. These had been very much alike in prioritising problems, writing objectives and planning care.

In C.M.C. the ward sister assessed a patient, identified the problems, and presented the findings as a case presentation. After the case presentation, the ward sister and the researcher discussed the patient's problems and prioritised them in front of the group. Then they planned the care for the patient. The tutors and other ward sisters actively participated in contributing their ideas. They also worked out a care plan for another patient.

In both hospitals the participants felt that these sessions were very interesting and thought-provoking. The concept of individualised care and holistic care had become more clear to them and they felt the need to do it for all patients in order to care for them intelligently and effectively.

Implementation

The researcher followed up these patients and ward sisters to ensure that the planned care was implemented. The researcher attended several bedside reports in these wards and saw that the care given was documented. Confidentiality of records on the patient was maintained throughout the process. The patient and his/her family also participated in the actual care process. This is very important in India where families are close-knit and feel responsible for the health of their family members. The participating nurses were able to see the patients in the wards and to read the nurses' notes. Bedside reports were encouraged. The nurses who did not receive a bedside report felt the need to have one.

Evaluation

After a teaching session on evaluation, evaluation of care was demonstrated separately in each ward. In both hospitals, participants followed the same patients who were assessed before, and care plans were made and implemented.

In N.C.H. following discussions, the group had a practical session on evaluation. Evaluation of care of one patient was carried out by the nurses, in conjunction with the patient on several occasions, after assessment, planning and implementation. By now the patient had been in the hospital for two weeks and had undergone surgery. The participants returned to their three small groups, and spent an hour evaluating the outcome of care given to him. Since it was time for them to go back to the wards, the researcher had to stop the session. By then they were able to complete evaluation, but

wished they had had more time for discussion. The following day the researcher had an hour's discussion on their practical session. The members felt that this too was highly rewarding.

The participants found the session on models very interesting as it was the first time they had heard about nursing models. It really captured their attention, as the models - the activities of living model, Roper et al (1983), and the self-care model, Orem (1980) gave direction to planning nursing care. Systematic nursing became more meaningful and purposeful.

The researcher planned a repeat role-play for the review session but this did not seem necessary as each session had dealt in some depth with all aspects of systematic nursing and had been followed by group work.

Review session

In the last session change areas were identified. The members brought out the following points:

1. change is needed in nursing practice - change from task-allocation to patient-allocation
2. a problem-solving, individualised approach to patient care can be practised
3. introduce case presentation in clinical teaching
4. discuss plan of care with other health personnel, doctors and chaplain
5. introduce bedside handover (one hospital)
6. improve record system
7. introduce nursing care plan.

Besides the 18 hours of formal sessions with the nurse leaders, tutors and ward sisters, individual teaching was also given to those who were absent from any of the sessions. One sister was absent for two sessions, two sisters for one session.

In addition to the teaching given to the tutors and the ward sisters, one two-hour session on systematic nursing was given to trained nurses. It was repeated for the auxiliary-nurse midwives. Each group of students had a two-hour session separately, this included midwifery students as well. Nurses working in maternity wards, outpatient departments and operating theatres attended the sessions as the Nursing Superintendents felt that these sessions were very useful and educative. Night nurses also attended the sessions. All were supplied with a copy of a hand-out on systematic nursing written by the researcher (see Appendix 15). Slides on systematic nursing were also shown.

The researcher also provided reading material on systematic nursing. A book on systematic nursing care by Long (1981) was presented to the Nursing Superintendents to circulate among the tutors, ward sisters and any others who were interested. Teaching the Nursing Process (1980) - a Nursing Times publication, was made available to them. A copy of the Open University case file, work book and also the tape (1984) were made available to individual nurse managers and tutors who were interested in them.

The researcher also helped the nurses to make use of the libraries. The School of Nursing N.C.H. had more British nursing literature and C.M.C. had more American nursing literature. There was a lot of good literature on systematic nursing in the American

books and some in the British nursing journals. The researcher helped them to find out the literature already available there.

Evaluation of the teaching programme

At the end of the course, the participants were asked to fill in a simple evaluation form on the course. The main objective in doing this was to find out whether they found the course useful, meaningful and relevant and whether they were able to follow it or found it difficult (see Appendix 5).

Twenty nurses filled in the forms. They all said that they found the course useful. One person said that the sessions were too long and one said that they were too brief. All of them said that they were able to understand the content. They all expressed their opinion in writing that systematic nursing was a better approach to patient care. Some of their responses are given below:

> "Lectures on systematic nursing were very interesting. I feel that I had a real refresher course. We look forward to your coming to improve nursing in our hospital. Thank you very much for motivating our students to write the care plans. They too are learning a lot from these exercises."
>
> "I am very thankful, I gained much knowledge. I will put systematic nursing into practice."
>
> "I found systematic nursing useful. Problem-solving approach, care plans have been useful. These help to give better patient care. Thank you very much for presenting beautiful and helpful classes to us."
> "The nurses had greater interest in the patient as an individual, whole person (experienced by the one man we interviewed). I think it would lead to better patient/ nurse partnership, confidence for both, also satisfaction for both. Should result in better patient care especially psychologically and spiritually, better learning experiences for students."

> "The patient as an individual will be better cared for and have a part in planning his/her nursing care. It is more interesting for the nurse and will bring more job satisfaction. Improved documentation which is a need will be available."

The advisory group was asked to express their opinion about the content of the course. During discussion they expressed their opinion that the course content and presentation were very good and that it would certainly meet the objectives of the course in preparing the nurses to implement systematic nursing was found to be effective and usable. The teaching programme was tested between January and March, 1985.

Pre-testing of Nursing Assessment Forms

Pre-testing of Nursing Assessment Forms was done in both hospitals in medical and surgical wards. A total of 27 nurses including fourteen nurses in N.C.H. (two ward sisters, two staff nurses and ten general nursing students), and thirteen nurses in C.M.C. (four ward sisters, four trained nurses and five general nursing students) participated in assessing the patients. Nurses were able to fill in these forms in seven to nine minutes. The forms were filled in satisfactorily by all nurses. However, there was a slight common misunderstanding on the last item on Appendix 2b, information obtained from patients/relatives or both involved. Eight nurses out of fourteen in N.C.H. had written the full statement, for example, information obtained from patient and relative. Instead of placing a tick (✓) mark nurses in C.M.C. had written extra information about the patient. Five out of thirteen nurses did this. This could be attributed to the language problem. Indian nurses are not used to

short forms of English. Otherwise the assessment forms yielded data on:

- patient's personal history
- patient's medical history
- social history
- activities of daily living.

Although one condition for selecting patients for assessment was that they be aged 17-64 years it was necessary to extend it to 16-70 years. Gynaecological patients were also included as they were admitted into female medical and surgical wards.

Pre-testing of Nursing Care Plans

This was carried out by the researcher with sixteen patients in two hospitals. Eight were medical patients and eight surgical patients. Four patients were male and four female in each hospital.

The patients were classified as medical or surgical according to their symptoms and/or diagnosis as follows:

Male Patients	Female Patients
1. Gastric Pain (Medical)	1. Diabetes Mellitus (Medical)
2. Hemiplegia (Medical)	2 Hypertension (Medical)
3. Seizure disorder (Medical	3. Urinary tract infection (Medical)
4. Pyrexia of unknown origin (Medical)	4. Chest pain (Medical)
5. Burns (Surgical)	5. Menorrhagia (Gynaecological)
6. Cataract both eyes (Surgical)	6. Prolapse uterus (Gynaecological)
7. Maxillary Sinus growth (Surgical)	7. Fibroid uterus (Gynaecological)
8. Cancer colon (Surgical)	8. Prolapse uterus (Gynaecological).

The researcher was able to use the nursing care plans without any difficulty. She was able to list the problems and objectives, plan of care and evaluation. However, a suggestion was made by one of the nurse managers during a group session on planning, to have separate columns for problems and objectives instead of a joint column. This was rectified in the main study.

During this process some of the nurses developed an interest in writing nursing care plans. The researcher helped them to do so as there was no objection from the nursing administration. It also gave an opportunity to the researcher to assess whether the other nurses were able to use the care plans without difficulty, and the effectiveness and usefulness of the forms for nursing care plan.

Pre-testing of Nursing Assessment Forms and Nursing Care Plans took place between February and March, 1985, and these were found to be usable, relevant and acceptable to all the participants. No problems were encountered by anybody. However, it was decided to have separate columns for problems and objectives in the Nursing Care Plan.

RESISTANCE TO CHANGE

The researcher encountered this problem quite early during her exploratory work. Although it was threatening, the researcher was not alarmed by it as resistance to change was anticipated.

Particularly in N.C.H. the two ward sisters resisted the idea of introducing patient allocation. They feared that this would bring problems in ward administration and with the doctors. No drastic steps were taken to introduce patient allocation. By the time the

researcher completed preparations for the study, patient allocation charts were drawn and hung in each ward by the nurse managers.

At the first steering group meeting one of the members strongly opposed any change in nursing practice. By the time the researcher completed the teaching programme she was one of the first ones to identify the areas with potential for change and felt the need to change. All the ward sisters and tutors felt the need to change.

NEGOTIATING CHANGE

On completion of the exploratory study and the pre-testing the researcher felt the need to make preparations for the oncoming change. In view of this she held meetings with people in responsible positions in both hospitals. An account of these is given below.

Administrative Committee Meetings

Before the researcher had started the exploratory study, she met with the hospital administration committees and discussed her project in order to get full co-operation from the management. The researcher also met them from time to time and kept them informed about the operations. This resulted in better understanding, co-operation and communication, and better relationships.

Steering Group Meetings

The researcher had two meetings with each steering group. After assessing their willingness to co-operate with the change process, the researcher felt that they should be prepared as group leaders and internal change agents. Mauksch and Miller (1981) say if people are

involved they co-operate. People are motivated if they feel they are contributors. If they are motivated they participate actively. The functions of a steering group were listed in Chapter 4.

Later on the steering group members assumed the role of group leaders and internal change agents. The second meeting was a feedback meeting on the researcher's preparatory work (see Figure 5.3). The Nursing Superintendents requested this meeting in order to have feedback on nursing in their hospitals. The researcher took this opportunity to encourage them to form support groups among nurses, to introduce the new concept in nursing.

Advisory Group Meetings

Since both hospitals were included in the project, the researcher felt that it was good to get the nurse managers together so that they could exchange their ideas, learn from each other, and discuss problems common to these hospitals and Schools of Nursing. Since they were involved in the decision making process, it was felt necessary to actively involve them in the change process too. As noted in Chapter 2 the success or failure of any change depends on the change agent and the client system and many aspects of this relationship are established very early in the change process. Nurse managers were the ones who could initiate, sustain and maintain change. Bearing this in mind, the researcher arranged a meeting with the advisory group. The researcher also suggested visits between the hospitals. The nurse managers of N.C.H. spent two days in C.M.C. During this time they went around the hospital and the School of Nursing with the Nursing Superintendent and discussed the matters concerning nursing

education and administration. This included assignment of work, duty rosters, procedures for giving medicine, record systems, clinical teaching and inservice education, staff meetings and other matters which interested them.

The researcher did not feel the need to attend this day's programme, but joined them during coffee and lunch breaks. On the second day the researcher had a meeting with the advisory group. The researcher appreciated the effort they made in getting together.

The discussion was mainly focussed on the following points:

- whether or not the hospital felt the need to change their nursing practice
- whether or not they could cope with the change
- whether the nurses are motivated to practice this new approach, systematic nursing.

There was a great deal of direct and open discussion (see Figure 5.4). The researcher only acted as a resource person. The following was the outcome of the meeting:

1. The advisory group felt the need to change from task-oriented nursing to systematic nursing. The teaching of systematic nursing, practical sessions and introduction of patient allocation convinced them that systematic nursing is a better approach.
2. Practicalities of patient allocation were considered. Each hospital decided to follow patient allocation.
3. Both hospitals felt the need to introduce the case presentation model in clinical teaching and subsequently make care plans.

Figure 5.3 Steering group in session

Figure 5.4 The advisory group in session

4. The advantage of practising bedside hand over was considered.
5. The group felt the need to review their records and design a comprehensive nurses' record which could be used in these two hospitals.

The researcher volunteered her help and assistance wherever it was needed. The researcher advised them to keep in touch with each other so that they would know the problems they encountered and the progress they made. The outcome of the advisory group meeting was communicated to the steering groups. It was proposed to have another advisory group meeting but due to extraneous circumstances this was not possible. As the researcher was travelling between these hospitals, she kept them informed about the matters in each hospital.

A Meeting with the Doctors

The researcher felt the need to have a meeting with doctors in the hospitals. The meeting lasted for one hour in each case. It was attended by six doctors and a business manager in one hospital, and six doctors in another hospital. The purpose was to keep them informed about the research project as patients, nurses and records were involved in it.

The new approach in nursing, that is systematic nursing, and the philosophy behind it were briefly presented. Two doctors in N.C.H. were very interested in the holistic approach to patient care. The group showed great interest in hearing about systematic nursing. The doctors contributed what they learned in seminars. Lively discussions were generated. They all felt that it was good to take up this new approach in patient care. One doctor was particularly interested

in models for practice. She heard something about stress adaptation and wanted the researcher to enlighten her on it. The information was made available to the doctor, in due course.

Earlier the researcher heard from the ward sister in N.C.H. that there would be problems from doctors in practising patient allocation. The researcher had tactfully dealt with this issue and the doctors expressed willingness to co-operate, feeling that it was a better method.

Since N.C.H. did not have standard records for the medical assessment of patients, they showed great interest reading through the Nursing Assessment Forms developed by the researcher. The researcher explained that the purpose was not to duplicate medical records, but to use them as data collecting tools and to review records at a later stage. All the doctors were supplied with a hand-out on systematic nursing and some doctors collected the Nursing Assessment Forms as they found them useful. The meeting was very rewarding.

Meeting with the Chaplain

One of the hospitals had a full-time chaplain and a woman preacher. The other hospital had part-time preachers. The chaplain explained to the researcher the way they met spiritual needs of patients. This included bedside visits, meeting with patients' relatives, broadcasting and film shows. The researcher and the chaplain exchanged their ideas about individualised patient care and the importance of meeting the patients' spiritual needs.

SUMMARY OF THE PREPARATORY STUDY

From the discussion presented in this chapter it was apparent that both similarities and differences existed between the two hospitals in relation to their administrative structure, allocation of work, allocation of patients and patients' profile. The perceptions among nurses and patients of systematic nursing also differed in the two hospitals.

The administrative structure in both hospitals was more or less similar. The Medical Superintendent was the top manager and the nurse manager worked in consultation with the Medical Superintendent, though they had complete freedom to run their departments in the way they would like.

Identification of patients was a problem in N.C.H. as the hospital did not use either bed number or patient labels but this was rectified as soon as the researcher started her work. Now the hospital used bed numbers for patient identification. C.M.C. had been using bed numbers already, so it did not cause any problem there.

Nursing practice in N.C.H. was completely task-oriented and followed a traditional model. Neither patients nor nurses were identified by their names. Nurses went by their numbers according to their seniority and assumed their duties within the limits of the hierarchy. Team nursing was in practice in C.M.C. Nursing practice in this hospital was neither fully patient-oriented, nor task-oriented.

In N.C.H. there was no written allocation of work. Nurses assumed their responsibilities according to their seniority. Since

there was no identification of the nurse on duty it was difficult to know which nurse was on duty and for whom she was responsible. The duty roster was made up by the Nursing Superintendent and the ward sister had no freedom to alter the duty hours according to the ward's convenience. Unlike N.C.H. the ward sister allocated work to the nurses in her ward in C.M.C. Patient allocation to each nurse was clearly written. Each nurse in the team had a definite number of patients, and clearly defined duties. The ward sister had freedom to arrange the duties and to run the ward in the way she chose.

In N.C.H. communication and nurse-patient relationships appeared to suffer as the nurses were busy with tasks and did not find time to talk with patients. There existed some amount of communication and some nurse-patient relationship was also observed in C.M.C.

The role of the ward sister greatly differed in the two hospitals. In N.C.H. the role of the ward sister was not clearly defined, nor did she perceive her role as a ward manager and as supervisor. The ward routine substituted for active management. In C.M.C., on the other hand the ward sister was the key person in managing her ward, and she maintained her role as a ward manager and as supervisor. She had a clearly defined job description.

The patients' profile appeared to be inadequate in N.C.H. The importance of documentation was not conceptualised by the nurses, seldom by doctors, and when perceived by doctors, it was limited only to doctors' notes. Since there was no standard format, documentation had become a difficult task. Doctors and nurses shared records. They felt the need to develop a proper record system as a result of the discussion they had with the researcher. The patient's profile

in this hospital included a case sheet (which was a blank paper to be filled in by the doctor after medical assessment), an additional case sheet and two temperature charts - one for BD, TPR, and the other for q.i.d. TPR. The latter was a duplication of recording. Nurses' records were mainly used for patients who were on intravenous infusion. The operation record was kept by the doctor for surgical patients.

C.M.C. had a standard patient profile which included doctors' order sheets, physical examination sheets, TPR and BP charts, laboratory investigation sheets, nurses records, intake and output charts, consent forms for surgical patients, operation charts and bill charts. Doctors and nurses seemed to understand the importance of documentation and they kept their records up to date. However, the need to use Nursing Assessment Forms and Nursing Care Plans was appreciated and willingness was shown to improve their record system.

Perceptions about systematic nursing differed in the two hospitals. Only two nurses in N.C.H. perceived it as a threat to change their traditional model and initially resisted any change. Later on however they developed an interest in systematic nursing and welcomed discussion and extended their co-operation. In C.M.C. nurses considered it as a tool to individualise patient care.

Patients in N.C.H. found it difficult to conceptualise individualised care, as nursing had been task-oriented. They were rather passive recipients of care, and did not contribute much to their care. In C.M.C. patients had high expectations about nursing care since combined patient allocation and team nursing was in practice.

Patients in this hospital expected nurses to talk with them and find out their problems besides performing tasks.

Eighteen hours of teaching on systematic nursing was given to nurse managers and ward sisters in each hospital. This included practical sessions, group work, role playing and simulation. Nurses were able to identify the problem 'absence of systematic nursing' and felt the need to change from task-oriented nursing to systematic nursing. Once the problem had been identified, patient allocation was introduced. Besides this, they were introduced to Nursing Assessment Forms, Nursing Care Plans, case presentations and bedside reports. Nursing Assessment Forms were tried with ward sisters, trained nurses and general nursing students in both hospitals. The researcher wrote Nursing Care Plans for medical and surgical patients in these two hospitals. Pre-testing of these forms proved that they were effective and usable.

The researcher as an external change agent developed an awareness of the need to change nursing practice, and initiated and influenced change, but no change was forced on the client system immediately. Some changes had taken place since the researcher started working with the hospitals.

- patient allocation had been introduced in N.C.H, and had been improved in C.M.C.
- bedside reports (hand over): Nursing Superintendents and the tutors started attending bedside reports in the morning
- the duty hours were rearranged in C.M.C. The following pattern was started to allow more nurses during peak hours of work, in order to carry on with patient allocation:

07.00 - 12.30 hours, 16 - 19 hours

07.00 - 16.00 hours

N.C.H. had plans to work out a proper time schedule

- started identifying patients and nurses by their names instead of numbers
- patients' bed identification in the wards: bed numbers are written in N.C.H.
- grouping of patients was done according to their diagnosis in C.M.C. and name boards were written
- started case presentation for clinical teaching
- concept of individualised patient care was being emphasized in the wards
- plans were made for staff meetings and inservice education in N.C.H.
- communication improved
- increased awareness of scientific approach in nursing.

During this exploratory study the researcher established positive professional relationships and mutual trust and demonstrated her credibility. This period had laid the foundation for the main study and prepared the hospitals for the oncoming change. The researcher had been accepted by the hospitals, even though her role was as external change agent and a resource person, which made things much easier for both the researcher and nurses. The nurses perceived the researcher as a resource person who could offer a great deal to improve nursing practice. On the whole the exploratory study was found to be very useful, encouraging and highly rewarding.

In these two hospitals, the nurse managers, sister tutors, ward sisters, trained nurses and student nurses had been prepared for planned change. As nurses are part of a multi-disciplinary clinical team, doctors and other hospital personnel were kept informed, included and prepared for planned change.

One of the Nursing Superintendents wrote to the researcher and made the following remarks:

> "Thank you very much for fitting in so well with us and for being so undemanding. We look forward to your coming for your main study."

In the light of the preparatory work discussed above, the main study was designed to implement systematic nursing in these two hospitals under a planned change model designed by the researcher incorporating Lippitt's (1973) and Grypdonck et al (1979) planned change model for action research. The planned change model has been fully discussed in Chapter 4.

The objective of the main study was to change nursing practice from a traditional task-oriented approach to a more scientific and problem-oriented approach, that is systematic nursing. The change objectives and the process of change are described in the following chapter.

CHAPTER 6

THE CHANGE PROCESS

INTRODUCTION

The purpose of this chapter is to describe the process of change to systematic nursing phase by phase. A period of six months was allowed for this purpose. The initial work included assessment of the change environment and appraisal of the nurses involved in the change process. The stability of patient allocation was assessed. The use of Nursing Assessment Forms, Nursing Care Plans and the case presentations in the absence of the researcher between March 1985 to August 1985 was assessed.

Phases 4 and 5 of the planned change were concerned with the main study. The main objective of this study was to introduce systematic nursing in medical and surgical wards of selected hospitals in India. In order to introduce systematic nursing the following change objectives were formulated.

THE CHANGE OBJECTIVES

1. To prepare nurses adequately to implement systematic nursing. This includes formal class-room teaching and also informal individual and group teaching in the wards.
2. To introduce and stabilise patient allocation.
3. To develop a proper record system and introduce a documentation system.
4. To form an advisory group to co-ordinate the change activities.
5. To form steering groups to assist and monitor the planned change.
6. To introduce systematic nursing in phases.

7. To prepare internal change agents to assist in maintaining and stabilising the change.
8. To establish support groups for individual involvement, participation in and contribution to the change process.

With these objectives in mind, it was planned to introduce systematic nursing in five wards, in phases over three months time, within the planned change model.

Meetings with the hospital administrative committees, nurse leaders and steering groups helped the researcher to obtain their co-operation and to plan the activities of the change process. These included the teaching schedule, re-orientation, preparation of the internal change agents and the record review system. Observations and evaluations were a continuous process. Informal talks with nurses and patients had become part of the assessment of change. Unstructured interviews were conducted in order to find out the views of nurses and patients about the change of nursing practice from the task-oriented nursing to a more systematic and scientific approach. A natural and relaxed atmosphere in the wards made the researcher, nurses and patients feel more at ease and they were able to discuss issues openly without any constraints or fears. The researcher was able to observe the work in the natural setting. Some doctors and paramedical workers also actively participated in the discussions, which proved to be a valuable contribution.

REASSESSMENT OF THE CHANGE ENVIRONMENT

Two of the ward sisters in N.C.H. who had been included in the preparatory study had left for government jobs. A new ward sister

who had a B.Sc.(N) had been newly appointed, as well as two registered nurses and a sister tutor. In addition four students who attended only introductory lectures during the preparatory study had now completed their training and were working as registered nurses in the medical and surgical wards. In C.M.C. three senior trained nurses had been promoted to nurses in charge, as two of their ward staff were planning to leave to take diploma courses in October, 1985. One new ward sister had been appointed. One more with a B.Sc.(N) had joined as a sister tutor while yet another nurse, having completed her one year diploma course, had been appointed as a sister tutor also.

Meetings

As negotiation was part of the change process, the researcher had meetings with the hospital administrative committees in both hospitals and with the nurse managers, steering groups and sister tutors. Hospital administrative committee meetings were held to discuss the plan for the change process, in order to keep them informed about the forthcoming change, and also to obtain co-operation and support from the management. The researcher expressed her appreciation for the co-operation during the preparatory study, and then briefly discussed her research project and the plan for the main study. She supplied a copy of the plan for the main study and explained how systematic nursing would be implemented, phase by phase (see Appendix 8a and b). The discussions included a review of records as well. Both hospitals decided to print the records at their own cost, since these were going to be used in their hospitals for their patients. The

researcher was assured of their co- operation, and willingness to change to systematic nursing was expressed.

The meetings with the nurse managers covered most of the topics discussed in the hospital administrative committee and the record review was discussed in detail. N.C.H. wanted to use the same forms for nursing assessment and the nursing care plans with suggested modifications. A new medicine chart was introduced in August 1985. This replaced the old medicine book. They decided to have a separate fluid chart and a nurses' record for progress notes or nurses' notes. This had been recommended but they could not introduce it with immediate effect, as they had a large number of these records in stock. One of the important considerations was to make use of the existing records with modifications. C.M.C. wanted to use the Nursing Assessment Form and the Nursing Care Plan until they got their new version printed. Since they already had a medical assessment form, the question of having a separate assessment form for nurses was discussed. The importance of having a nursing assessment was appreciated and both medical assessment and nursing assessment forms were reviewed to avoid duplication. It was decided to use one side of the assessment form for medical assessment and the other side for nursing assessment. Although the records were reviewed, it was decided to use the same nursing assessment form until the revised forms were printed. This provided enough learning experience for nurses in doing nursing assessment and at the same time the nurses were able to make use of the existing records.

A 12 hour teaching schedule was worked out by the nurse leaders in both hospitals for the benefit of those who had not attended the previous one, with a view to adequately preparing them for change. A reorientation schedule was worked out for those who had already attended the lectures. The researcher had meetings with the steering groups in both hospitals. These meetings helped her to discuss and assess the use of patient allocation, Nursing Assessment Forms and Nursing Care Plans and case presentations. The researcher was happy to learn that these had been continued even during her absence. To this end, the researcher corresponded with the nurse managers and the steering groups between March and July 1985. The nurse managers were eager to use these forms so that the participating nurses would have enough learning experience before the implementation of systematic nursing. A change that comes from within the organization is more stable, hence the researcher was gratified by the initiative of the nurse leaders and the steering groups.

The sister tutor group was important from the point of view of teaching students, as well as in terms of supervision and involvement in the change process. This was a highly stimulating group which greatly assisted the researcher in the change process. One sister tutor in N.C.H. gave ten one-hour lectures to the general nursing students. The tutors in C.M.C. helped the students with case presentations, following assessment and planning nursing care. Thus the interest was kept up in both training schools in anticipation of change. Tutors in both hospitals reported that patient allocation was in practice and they found it very educative for students. They also noted that communication and nurse-patient interaction had

improved, resulting in more satisfaction among nurses and patients. Their attitudes towards change were now very positive. The researcher also met the ward sisters, staff nurses and students in each ward involved in the study.

A two-week teaching schedule was arranged for those trained nurses and general nursing students who had not had the required number of lectures between January and March 1985. Five trained nurses, three ward sisters and 23 general nursing students in N.C.H., and 12 trained nurses and 21 general nursing students in C.M.C. attended the lectures, which included practical sessions. One sister tutor and one ward sister in N.C.H. and two sister tutors in C.M.C. had separate sessions. They already had had some theoretical preparation either in their degree or diploma programmes.

A period of two weeks in each hospital between the programme of teaching and the implementation of the first phase of systematic nursing seemed necessary in order for the nurse leaders to get the records printed and also to staff the ward adequately. Nursing staff and doctors were well informed about the forthcoming change.

Unstructured Interviews

Prior to the phased introduction of systematic nursing the researcher interviewed ward sisters, trained nurses and general nursing students in N.C.H. and C.M.C. The purpose of these interviews was to find out the view of nurses regarding systematic nursing and the practicalities of patient allocation. Besides this, she had also talked to some doctors and paramedical workers. The interviews took place on

different days within the first week in each hospital. Each interview lasted approximately 30-40 minutes.

Interviews with the ward sisters and the trained nurses

Altogether eight ward sisters and 15 trained nurses were interviewed in both hospitals. Below are examples of the kinds of positive statements made about patient allocation in the course of the interviews. See Appendix **9** for the Interview Schedule.

One of the sisters said:

> "Now I am able to carry on with patient allocation. Patient allocation chart is made and kept in the ward. The nurses check with the chart every morning before they go to their patients. I feel that the work is now better organised, and the nurses like it. They all know their patients' names, their history and they plan care for them. There is a lot of improvement in nursing care since you came to us in January, 1985. Patient care is getting individualised. Nurses seem to take better responsibility because they know that they are accountable for their patients' care. The other difference is handover and takeover. Previously, the nurses did not report about the work they had done. But now they report about the care given to their patients, and what else has to be done for them. That gives me feedback."

The researcher interviewed another sister who had joined only a month before. She had graduated from a very big hospital where patient allocation was being practised. She gave the following account.

> "Nurses are practising patient allocation willingly, not by force. Their attitudes towards patient allocation are very positive, for example patient gets better care, provides better learning experience to students, better satisfaction to both nurses and patients. There is better organisation of work."

Yet another sister said:

> "I am practising patient allocation in my ward. It is a good system. Students can learn more about the patients and give better nursing care. As you know, there is shortage of staff. This makes it difficult at times, especially when the ward is busy or if an emergency occurs. Sometimes the work is incomplete especially when the students have more lectures."

These responses suggested that patient allocation was in practice in all the study wards.

Six trained nurses in N.C.H., three in each ward, and nine in C.M.C., three in each ward were interviewed. A total of 15 trained nurses were interviewed. Accounts given by some nurses in both hospitals are described here.

One of the trained nurses said:

> "I really like patient allocation. Patients get good care. Students are showing interest in their patients. They are learning better by spending more time with their patients, reading doctors' notes and also by giving clinical teaching every now and then. They are also recording what they have done. It is a very good approach. I like it and I would like to continue with it. It can be practised without any difficulty."

The other said:

> "I follow patient allocation. I also guide students and encourage them to follow. There is no difficulty. There is great satisfaction in caring for the patients. Patients are also satisfied. Patients in maternity wards ask their nurses 'why are we not assigned to nurses like the general patients?'"

Apparently talk had been going on between patients of different wards and their relatives. Patient allocation had not been introduced in maternity wards. This suggested that patients and their relatives came to perceive a difference in nursing between the patient allocation wards and the task allocation wards.

Most of the trained nurses in C.M.C. said that they were practising patient allocation and would like to continue with it. Some of them expressed the difficulty encountered due to the problem

of shortage of trained nurses. This made it difficult to practise patient allocation especially when the wards were busy, during emergencies and when the students had more lectures. They said they made every effort to continue with it. They seemed to understand the value of patient allocation to them as well as to their patients.

The researcher discussed these particular problems with the Nursing Superintendent and discovered that there was an acute shortage of trained nurses since ten of them had left for government jobs. The third year general nursing students were sent to a government hospital for affiliation. However, she called some trained nurses for interviews and they were to join in the beginning of September, 1985. The third year students were withdrawn from the government hospital and the problem was solved.

Interviews with the general nursing students

Ten general nursing students were interviewed in N.C.H. None of the students gave the impression that they felt patient allocation had been imposed on them. They appeared happy to continue with it and found patient allocation a learning experience.

In C.M.C. ten general nursing students were interviewed. Seven of them gave similar accounts of the merits of patient allocation and expressed their desire to continue with it. But they also talked about their difficulties, such as shortage of trained nurses, and lectures in the morning hours when the wards were busy. This problem was discussed with the Director of Nursing Education and the lectures were changed to a later time. Students happily reported that they gave presentations on their patients every week in their ward

teaching programme, and also did some case studies. They were able to do nursing assessment for some patients and had written nursing care plans.

Interviews with the patients

A total of fourteen patients were interviewed in N.C.H. Eight patients in female medical and surgical and six patients in male medical and surgical wards were interviewed. Patients in female medical and surgical wards appeared to be very happy with the care they were receiving. The notion of 'my nurse' and 'my patient' could be heard from every patient and nurse in the ward. One patient said:

> "My nurse does everything for me. She is very good, she talks to me and understands my problems and my family problems as well."

Patients in the male medical and surgical wards reported that they were assigned to particular nurses. Two or three nurses took care of them during the day, usually one trained nurse and one student nurse. They said that the nurses showed personal interest in finding out their problems and complaints and gave individualised care. A diabetic patient said that one nurse had been assigned to him, and she did everything for him, for example, bathing, dressing, giving insulin injections and so on. She also provided health teaching. The rest of the patients said that they were happy with the nursing care that they were getting. They knew their nurses and they spent time in talking with them. Individual talks on health and group health teaching were given to patients and their relatives.

Sixteen patients were interviewed in C.M.C., eight patients in female medical and surgical, and eight in male medical and surgical

wards. Patients in female medical and surgical wards spoke highly of the care given to them. Patients also noticed that there was a shortage of trained nurses. Otherwise they said that nurses were assigned to them; nurses talked to them, found out their problems, and helped them. Eight patients were interviewed in male medical and surgical wards. There was no shortage of nurses in this ward. Patients seemed to be satisfied with the care that they were receiving. One patient said that everything was done systematically. On admission the nurse took his history, found out his problems, asked about his diet and also talked to his relatives. Health teaching was given. All the patients expressed their satisfaction.

Informal talks with doctors and paramedical workers

Two doctors in N.C.H. said that they were quite happy with the nursing practice. They said that the emphasis was more on patients than on tasks. One doctor said:

> "Previously nurses used to be very busy with their jobs and they were not seen much at patients' bedside, but now nurses spend more time with their patients. Nurses' knowledge about patients has improved. When I go to make rounds, the nurses seem to know more about their patients' diagnoses and treatment. Nurses now read patients' charts. I am very happy to work with them."

The other doctor said:

> "Nurses are really getting involved with this new approach. They spend more time with their patients. Communication has improved. They are doing assessment, wish we doctors had one for ourselves. They are also having clinical teaching. That is very interesting. We teach sometimes if there is an interesting patient."

The researcher spoke to two doctors in C.M.C. One doctor had a discussion for about an hour, and wanted to know all about the

researcher's work, and how she was planning to change the nursing practice into a systematic approach. (This particular doctor had worked in the UK for five years and returned to India only six months previously). He said that he was very happy to see changes being made. The other doctor said that systematic nursing would work with the students and nurses who had qualified from the schools in recent years, but she wondered how much the older nurses would appreciate it. Personally the doctor was very happy to see nurses practising patient allocation and having clinical teaching.

The researcher talked to some paramedical workers in both hospitals. They also said that they found a difference in nursing practice and that nursing was beginning to change and the emphasis was more on patients.

Observations of the Researcher

During these two weeks the researcher also made observations in both hospitals to find out how far patient allocation was practised and how far it was stabilised. Four trained nurses and ten general nursing students in N.C.H. and six trained nurses and ten general nursing students in C.M.C. were observed during morning and evening shifts. It was observed that as each nurse came on day duty she checked with the patient allocation chart before she started caring for her patients. The problem of shortage of trained nurses made patient allocation difficult in C.M.C., especially when there were only two trained nurses on duty.

The researcher was able to observe nurses communicating to patients and establishing nurse-patient relationships and interactions.

For example the researcher observed a nurse apparently having a very good interaction with an elderly patient who was admitted with a fractured neck of femur. The nurse became involved with the patient and his relative, understanding their problems and expressing her concern. The researcher also witnessed patients waiting to see their nurses to say good-bye before they left the hospital. Examples like this were found in both hospitals.

Fifteen nursing assessments and six nursing care plans were written in N.C.H. Twenty nursing assessments, sixteen nursing care plans and twenty-five case presentations were done in C.M.C. during the absence of the researcher between March and July 1985. Though the tutors did clinical teaching there was no active involvement of trained nurses and students. They were waiting for the researcher to introduce and establish case presentations.

The process of reassessment, involving interviews and observation confirmed that patient allocation had been practised in both hospitals. The fact that the nurses had continued with the nursing assessment and nursing care plans even in the absence of the researcher was a source of encouragement. The positive attitudes of the hospital administrative committee members, nurse managers and the other nurses towards change instilled confidence in the researcher that the hospitals were ready for the change and that they could cope with it.

Summary

This period of four weeks (that is, two weeks in each hospital), enabled the researcher to hold meetings with the hospital administrative committees, steering groups and tutors. The great advantage to

the researcher was that it kept them informed about the plans for the change process and secured their co-operation. The researcher was also able to prepare the nurses adequately for the implementation of systematic nursing. This involved individual, group and formal class-room teaching to those nurses who had not had adequate preparation during the preparatory study. Internal change agents were prepared during this time. The change environment had been reassessed. Informal discussions and unstructured interviews with the nurses, patients and other hospital workers helped the researcher to evaluate the activities carried out (patient allocation, nursing assessment, nursing care plans and case presentations) during the absence of the researcher between March and July 1985. Observations in clinical situations had confirmed the positive reports of the nurse leaders and the other nurses. Records had been reviewed and reprinted.

The readiness, willingness and positive attitudes of the nurses towards change and their ability to cope with it had been an encouragement and gave confidence to the researcher to start with the implementation of the first phase of systematic nursing.

IMPLEMENTING SYSTEMATIC NURSING

Implementation of systematic nursing took place in phases over a period of sixteen weeks in both hospitals, simultaneously. A period of three weeks was allocated for the introduction of each phase of systematic nursing, within the planned change model. Before commencing the first phase of systematic nursing (that is nursing assessment), the researcher met the nurse managers for detailed discussions about the records, and the availability of nurses and

patients. The revised nursing assessment form and the nursing care plan form were carefully studied for accuracy by the researcher and the nurse managers involved. These forms were kept in the study wards by the Nursing Superintendents.

The researcher also had meetings with the steering groups before commencing, and on completion of each phase of the introduction of systematic nursing. The conditions for the selection of patients and nurses were discussed so that the adequate number of patients and nurses would be made available for implementation of each phase of systematic nursing. The role of the internal change agents was reviewed. Brief meetings were held in the study wards, in which the researcher was able to meet the ward sisters, the trained nurses and the students together. Once again the researcher discussed each phase of systematic nursing, the conditions for selection of patients and also what was expected of the nurses. It also gave them an opportunity to express their views and doubts and clarify any other matters. These meetings seemed necessary at this point, firstly because clarity of communication was important to ensure that everything was understood by the nurses involved in the study, and secondly in order to elicit suggestions from nurses, to communicate what was coming next and to consider their point of view. Since the researcher had already been accepted by the staff members, she found no difficulty in approaching the nurse leaders, ward sisters or any of the hospital staff. She was given complete freedom to enter any ward at any time, to talk to patients and nurses, and to help them as necessary.

Five wards were involved in the first phase, in two hospitals, one male and one female medical and surgical wards in N.C.H.and one

male and two female medical and surgical wards in C.M.C..

An appropriate starting date was selected in both hospitals, making sure that the maximum number of nurses would be available, and that the normal work load in these wards would be low. A happy and conducive environment was maintained, as it was important that there be no conflicts among nurses, or between nurses and teaching staff and nurses and other personnel.

Phase One - Assessment

The first phase of systematic nursing introduced was nursing assessment. The objective was to introduce nursing assessment in the study wards. It was hoped that the participating nurses would develop communication and interpersonal skills in order to collect appropriate data from the patients by using the Nursing Assessment Form Appendix 2a and b. Thus assessment forms would yield data on patients' personal, medical and social history and also data on patients' activities of daily living, including their religious beliefs and recreational activities. The purpose of nursing assessment was to identify patients' problems in order to plan nursing care. It was planned to introduce this phase in each hospital over a period of three weeks.

Preparation of nurses

The researcher started the day with the ward nurses. She attended their morning reports. After the usual ward routines, the purpose and process of the nursing assessment and the criteria for selection of patients was reviewed. By this time the ward sisters

were less busy and the sister tutors were around to help guide the participating nurses.

Introducing the first phase

The researcher first started the assessment phase in N.C.H. and one week later the same phase was implemented in C.M.C. First of all patients were selected for assessment in one ward, the female medical and surgical ward. Some admissions new that day and some patients admitted within the previous 24 hours were selected.

The ward sisters were the first to start with nursing assessment. This encouraged the trained nurses and students. The researcher spent one hour in the ward after starting the assessment phase then moved to the male medical and surgical ward. The same thing was repeated in the male ward. Although it took only five minutes to walk from one ward to the other, the researcher spent approximately one hour in one ward at a time, in order to give better supervision and guidance. After spending one full week in N.C.H., the researcher travelled to C.M.C. and started the assessment phase in the same manner. She started first in female medical and surgical ward I, next ward II, then lastly in the male medical and surgical ward.

The participating nurses in both hospitals were able to assess their patients. Data were obtained on patients' personal, medical and social history. Though the nurses did not write care plans at this stage, they were able to identify patients' physiological, psychological, social and spiritual problems from the data they had collected. This had been confirmed by asking the participating nurse to give a brief account of her patient, on completion of an assess-

ment. A central position was accorded to the patient as a person and an individual.

The steering group, especially the sister tutors, had been a great help during this period. They offered maximum help and guidance. One ward sister was exceptionally good at handling the change process. Since the nurses in both hospitals had been practising nursing assessment for the eight weeks prior to the implementation, they did not find it difficult to cope with. However, some information (for example religious beliefs or recreational activities) could not be obtained in the first stage of assessment. At times, the nurses were able to collect this information during the second stage of assessment with their patients. The implementation was closely followed but not controlled. The growth of nurse-patient interaction was observable at this stage. Patients and their families were happy that the nurse found time to talk to them and find out their problems.

The researcher spent one hour in the morning and one hour in the evening in each study ward besides attending their morning and evening reports and clinical teaching. Besides this, she also joined their coffee breaks and informal talks whenever it was possible.

Lippitt (1973) suggested a communication link to a change agent:

> "the change agent has access to various subsystems participating in the change effort. Obviously the change agent must be an effective communicator. To be effective the change agent needs to:
>
> - Be accessible to those who are working on the change, or who will participate in it
>
> - Develop trust between himself and all others concerned

- Level with people on plans and problems
- Keep the goals clearly in mind, and help others to do the same
- Define the responsibilities of others, and
- Develop listening skills.

In this way the change agent will find this not only to be an essential role, but one which is seen as contributing to the greater assurance of a highly successful contribution to the process of effective change." (p. 61)

This appeared to be a very practical and appropriate role for the researcher at this point. She also had to demonstrate competence in knowledge, practice and interpersonal and communication skills.

A total of 56 nurses, 29 in N.C.H. and 27 in C.M.C., participated in the assessment phase. Table 6.1 describes the number of nurses participating in the assessment phase and their professional status. This includes the ward sisters, trained nurses and general nursing students from each hospital involved in the implementation of the first phase of systematic nursing.

Table 6.1: Number of Nurses Participating in the Assessment Phase

Status	N.C.H.	C.M.C.	Totals
Ward Sisters	4	6	10
Trained Nurses	9	12	21
General Nursing Students	16	9	25
TOTALS	29	27	56

Altogether 72 patients were assessed in N.C.H. and C.M.C. Table 6.2 describes the total number, sex and the type of patients assessed, that is, female medical, surgical and gynaecological and also male medical and surgical patients.

Table 6.2: Number and Type of Patients Assessed in N.C.H. and C.M.C.

Type of patients	N.C.H.	C.M.C.	Totals
Male Medical	11	6	17
Male Surgical	6	6	12
Female Medical	11	11	22
Female Surgical	5	9	14
Gynaecological	3	4	7
TOTALS	36	36	72

Thirty-six patients were assessed in N.C.H. Table 6.3 describes the number, sex and the type of patients, that is, female medical and surgical and a male medical and surgical patients in two study wards.

Table No. 6.3: Number of patients assessed in N.C.H.

Type of patients	M.Med. & Surgical	F.Med.& Surgical	Totals
Medical	11	11	22
Surgical	6	5	11
Gynaecological	-	3	3
TOTALS	17	19	36

Table 6.4a describes the number, sex and type of patients assessed in three study wards, that is, two female medical and surgical wards, and one male medical and surgical ward in C.M.C. Altogether 36 patients were assessed.

Table 6.4a: Number of Patients Assessed in C.M.C.

Type of Patients	M. Med & Surgical	F. Med. & Surgical I	F.Med & Surgical II	Totals
Medical	6	4	7	17
Surgical	6	3	6	15
Gynaecological	-	2	2	4
TOTALS	12	9	15	36

Table 6.4b describes the number and type of patients assessed in N.C.H. and C.M.C.

Table 6.4b: Total Number of Patients Assessed in N.C.H. and C.M.C.

Type of Patients	N.C.H.	C.M.C.	Table
Medical	22	17	39
Surgical	11	15	26
Gynaecological	3	4	7
TOTALS	36	36	72

Two days after starting the assessment phase a question was raised by a ward sister in one of the female wards in C.M.C., whether only selected trained nurses and students should participate in the assessment phase. The ward sister expressed her intention of involving all the trained nurses and general nursing students in her ward, so that they would all get a chance to do one nursing assessment each. This would take away the feeling that the nursing assessment was done by only a few selected nurses and not the others. The researcher also intended to involve all the nurses in the ward, although starting with a few. The idea sounded good as nursing assessment and nursing care plans would be a regular practice in the medical and surgical wards after implementation of systematic nursing. After a brief discussion with the nurse leaders, all the trained nurses and the general nursing students in the study wards were included. Each nurse was able to do at least one assessment.

The sister tutors in N.C.H. asked the researcher why they were not included in the group. In response to this the researcher explained that they had an important role to play as internal change agents, that is, to be available in the study wards after their classroom lectures, to help, support and supervise the participating nurses. The sister tutors in both hospitals spent their time in the study wards along with the ward sisters. Since the tutors in these hospitals had a dual responsibility this did not duplicate the role of the ward sister. This made supervision much easier for the

researcher as she was travelling between the two hospitals every other week.

Though the problem of shortage of trained nurses still existed in C.M.C., the nurse managers made every effort to keep the maximum number of staff available in their wards. In addition to the newly appointed ward sisters, six nurse aides were employed. This freed the trained nurses from non-nursing functions like dusting and taking patients to X-ray. The other problem confronted was a difficulty with the English language, particularly in N.C.H. Although the auxiliary nurse-midwives were not included in the main study, the researcher felt that it was good to orientate them to the nursing assessment so that they could cope with the systematic nursing in the long run. In any case, all the hospital records are kept in English, so the auxiliary nurse-midwives were encouraged to try and write the nursing assessment and some of them did very well. They showed interest by attending the case presentations and also gave reports in English. This had been a help in bridging the gap between the two types of nurses. The nurse managers were satisifed with the situation.

Patients involved in the assessment phase and their relatives appeared to be happy that the nurses were able to spend some time finding out about their problems. It had been reported that at first

a few patients in N.C.H. were apprehensive about giving their social history, thinking that it would affect their hospital bills. However, adequate explanation to individual patients solved this problem. Henceforth, every nurse who assessed a patient explained that the information was collected to understand his/her physiological, psychological, social and spiritual problems in order to plan appropriate care. This seemed to lessen their anxiety. However, the researcher had to admit the fact that because a large number of people in India are illiterate and ignorant, they generally assume that if one has one's own house/a piece of land, or a good income, he will automatically receive heavier bills. This resulted in the patients tending to give false information, especially as regards their social history.

The assessment forms were kept along with the patient's profile but at a later stage these were collected by the researcher for the purpose of her records. The researcher and the steering group were able to make necessary comments on the assessment forms completed by the participating nurses. After reviewing the information the researcher returned the charts, keeping only the examples.

Though the researcher had been actively involved in the change process and had worked with the nurses, she was careful not to participate actively in the ward management. The researcher felt that she communicated the plans effectively, maintained the interpersonal and inter-departmental relationships, demonstrated competence, and assisted, motivated and encouraged the participating nurses, without involving herself in the management of the ward. Constant motivation and encouragement were given to the nurse leaders and the steering

groups. There was better understanding, communication, and exchange of ideas. The group worked as a team rather than maintaining their usual hierarchy levels. Though the hierarchy was necessary for administrative purposes, implementation of the assessment phase had been a co-operative, collaborative and group effort. This had been highly rewarding and satisfying to the researcher and to the participants in both hospitals.

On completion of two weeks in each hospital, the nurse managers, the steering groups and the participating nurses felt that they should move on to the second phase of the systematic nursing. The researcher had formal and informal discussions with the above-mentioned groups of nurses. Since the performance in the first phase had been satisfactory in both hospitals, it was decided to start with the second phase.

Summary of phase one

Implementation of the assessment phase of systematic nursing took place in both hospitals within Lippitt's (1973) planned change model. Formal and informal meetings were held with the nurse leaders, steering groups and participating nurses before and after completion of the first phase. An appropriate starting date was set in two study hospitals. An adequate number of participating nurses and patients were selected. A total of 56 nurses participated in the assessment phase and 72 patients were assessed. Problems such as shortage of nurses, language problems with auxiliary nurse-midwives, and apprehension of a few patients about giving their social history, were adequately dealt with. The researcher was an external change agent

and the steering group assumed the role of the internal agents. Although three weeks in each hospital had been planned for this phase, as the nurses had already spent some time on assessment, two weeks seemed to be sufficient.

Phase Two - Planning

Phase two of systematic nursing was concerned with the preparation of nursing care plans. The objective was to introduce nursing care plans in the study wards by providing enough learning experience for participating nurses in writing individualised nursing care plans for selected patients. In order to do this, the participating nurses were expected to assess the patients allocated to them, and identify and prioritise their actual and potential nursing problems. The nurses formulated objectives to help solve problems and plan appropriate nursing interventions with the patients, to meet the stated objectives (see Figure 6.1). It was hoped that nurses would be able to write both short and long term individualised nursing care plans, depending on the type of nursing problems identified for each patient at assessment. This was a patient-centered approach. A period of three weeks was planned for this phase.

Preparation of nurses

After introducing the nursing assessment phase in the two hospitals, the researcher had meetings with the nurse managers and steering groups. The purpose of these meetings was to find out about the practicalities of the assessment phase; for example whether the participating nurses had faced any problems, and to discuss the plan

Figure 6.1 Planning care with a patient

Figure 6.2 A clinical teaching session

for the second phase. The researcher checked on the number of patients and nurses available in each study ward and discussed how the nurses were going to introduce the second phase.

The researcher also met all the participating nurses in each ward and had informal talks with them. She was happy to learn that they had coped well with the assessment phase. The plan for introducing the second phase, and also what was expected of the participating nurses during this phase were discussed. The researcher visited all the patients in the participating wards in order to help the nurses select the patients for the planning phase.

Introducing the second phase

The planning phase was introduced first in N.C.H. and a week later in C.M.C. It was introduced in the same way as the first phase. The ward sisters, trained nurses and general nursing students in the two study hospitals participating in this phase numbered 49 nurses. The same nurses who participated in the first phase participated in the second phase as well. There was a reduction in the number of students in N.C.H. however, as some of them were posted to a nearby 'Eye Hospital' and some to the Community Health Department for their clinical experience. One ward sister in N.C.H. was on leave. Although there was a reduction in the number of students, there was better continuity of systematic nursing and less difficulty in following the instructions since the participating nurses were not new to the system.

Table 6.5 describes the number and professional status of nurses in N.C.H. and C.M.C. who participated in the planning phase.

Table 6.5: Number of Nurses Participating in the Planning Phase

Status	N.C.H.	C.M.C.	Totals
Ward Sisters	3	6	9
Trained Nurses	9	12	21
General Nursing Students	10	9	19
TOTALS	22	27	49

The ward sisters and the sister tutors helped the participating nurses to select the patients within their patient allocation. Patients were carefully chosen so that they would stay long enough in the hospital to allow nurses to make four consecutive nursing care plans. The Nursing Assessment Forms and Nursing Care Plan Forms were kept along with the patients' profiles. The participating nurses first did the nursing assessment and identified the patients' nursing problems. The researcher and the sister tutors were available to help them prioritise problems, formulate objectives and write appropriate plans for nursing intervention. Many of them needed only a minimum of help. Few of them found it difficult to formulate objectives or to decide on appropriate nursing intervention. Most of them were able to explain the rationale behind the nursing intervention. Nurses made use of their theoretical knowledge, interpersonal skills and decision making skills in writing the nursing care plans. Patients and their families were included in planning the care. For example, when it was discovered that a diabetic patient had a high blood sugar level, the nurse pin-pointed this problem and set the objective of reducing and maintaining it at normal limits. In order to achieve this objective, the nurse included the patient and his

family in planning the care. It was necessary that the patient and his family should know about a diabetic diet, firstly because this hospital did not have central catering and therefore the family was responsible for bringing the food, and secondly because a large proportion of an Indian diet contains carbohydrates, and the patient and his family, being illiterate did not understand the implications of a diabetic diet. Therefore the nurse educated both the patient and his family regarding the nature and the quantity of foods and the type of food which should be omitted from his diet. Then the nurse checked the diet brought by the family and made sure that the patient ate the diabetic diet. The nurse wrote the following nursing care plan to individualise nursing care for her patient:

- discuss diabetic diet with patient and his family
- make sure that the patient eats diet prescribed
- test urine for sugar 4 hourly and record
- give injection of soluble insulin as ordered by the doctor, according to the colour index of urine test
- send blood samples for blood sugar test once a week every Tuesday.

It is noted that examples such as this are taken out of context. This is not a nursing care plan on its own. These are nursing interventions stated by the nurse to meet one objective.

One male nurse, who was a very senior person, did two nursing assessments but needed help with identifying problems and setting objectives. It was noticed that some of the senior nurses needed more help than the general nursing students. They had been so used to task-oriented nursing over the years that they found writing

nursing care plans complicated and time consuming. This difficulty arose in spite of previous preparation by lecturers and practical sessions.

Altogether 61 nursing care plans were written, 25 in N.C.H. and 36 in C.M.C. The number of patients fell short in N.C.H. as two of the senior doctors were away on holiday. There were fewer male surgical patients in both hospitals as the senior doctor who was also the surgeon in C.M.C. had gone to a medical college hospital for six weeks for experience in reconstructive surgery. The absence of the surgeon for a week in N.C.H. affected the number of surgical patients. It was also harvest time in India and since many of the patients belonged to this working group, this affected the number of admissions. The reduction in the number of patients gave nurses more time to spend on the planning phase.

Table 6.6 describes the number and type of patients involved in the planning phase in N.C.H. and C.M.C.

Table 6.6: Number and Type of Patients Involved in the Planning Phase in N.C.H. and C.M.C.

Type of Patients	N.C.H.	C.M.C.	Totals
Male Medical	7	11	18
Male Surgical	3	3	6
Female Medical	10	11	21
Female Surgical	5	7	12
Gynaecological	-	4	4
TOTALS	25	36	61

Table 6.7 describes the number of care plans written in two study wards, that is, one male medical and surgical, and one female medical and surgical ward in N.C.H. Gynaecological patients in the female ward were also included in the study.

Table 6.7: Number of Nursing Care Plans Written in N.C.H.

Type of Patients	M.Med & Surgical	F. Med. & Surgical	Totals
Medical	7	10	17
Surgical	3	5	8
Gynaecological	-	-	-
TOTALS	10	15	25

Table 6.8 describes the number of nursing care plans written in three study wards, that is, two female medical and surgical wards, and one male medical and surgical ward in C.M.C. Gynaecological patients in female wards were also included in the study.

Table 6.8: Number of Nursing Care Plans written in C.M.C.

Type of Patients	M.Med. & Surg.	F. Med. & Surgical I	F. Med & Surgical II	Totals
Medical	11	2	9	22
Surgical	3	4	3	10
Gynaecological	-	1	3	4
TOTALS	14	7	15	36

Altogether 39 medical, 18 surgical and 4 gynaecological nursing care plans were written in the two hospitals. Table 6.9 describes the number and type of patients included in the planning phase in each hospital.

Table 6.9: Total Number of Nursing Care Plans Written in N.C.H. and C.M.C.

Type of Patients	N.C.H.	C.M.C.	Totals
Medical	17	22	39
Surgical	8	10	18
Gynaecological	-	4	4
TOTALS	25	36	61

The researcher spent one week in each hospital helping the participating nurses with the preparation of the nursing care plans. She went to the study wards every morning and evening. The researcher went through every nursing care plan written during her stay in that particular hospital and offered help in setting objectives and choosing appropriate nursing intervention whenever this was needed, especially to general nursing students. Five out of the 49 nurses who participated did not pay enough attention to recreational and religious activities. In discussion, the nurses said that those patients worked hard in the fields and went home late in the evening and hardly had any time for any kind of recreation.

A nurse may think that the patient has not got any time for recreational activities, but the researcher, being an Indian, had observed these farmers and coolies who work hard in the fields. When they get home, they have a nice hot bath and a full meal, lie down in

a cot in the open air, and gazing into the sky they tell stories about gods, angels, devils, stars and clouds, sing songs and recite poems. All this is part of recreation. Sometimes these people chat away for long hours, sometimes they go to the cinema and sometimes they enjoy folk songs. Some of the participating nurses seemed to fail to understand this because most of them still lived in nurses' homes, and hardly witnessed these events in their day to day life. So the researcher helped the nurses to understand the importance of including these under recreational activities.

Whether Hinduism, Islam or Christianity, religion is part of life in India. People worship gods and godesses of various forms. There are three crores (ten million) gods and goddesses in India. One could even find some patients worshipping a sun god early in the morning, some worshipping animals like cows, some snakes and trees, and some objects like stones and gods of many forms. Sometimes people have a fear that not worshipping a particular god results in some form of sickness. The nurses seemed to take religion for granted since every one had a religion. The researcher helped the nurses to understand the concept of individualised care. She explained to the nurses the importance of assessing a patient's belief system in order to respect his religion, understand and identify problems and plan individualised care.

The importance of documentation was emphasised. The Nursing Care Plan, Appendix 3, was used for this purpose. The participating nurses first listed the patients' nursing problems according to their priority, wrote objectives against each problem, and then wrote nursing interventions to meet the objectives. Each nursing care plan

contained problems, objectives and nursing interventions. The plans were short term, long term or specific nursing care plans, depending on the nature of the problem, the condition of the patient and the length of hospitalisation. Participating nurses were able to make precise statements though language was at times incorrect.

During this time the researcher spoke to ward sisters regarding their opinion about the planning phase. They said they found it very interesting and educative. They noticed nurses now staying more at patients' bedside and said that communication and documentation had definitely improved. Patients were getting special attention and they were happy about it. The trained nurses and general nursing students also expressed the view that they had greater satisfaction and that they found nursing more meaningful because they could apply theoretical knowledge in the clinical field. Understanding the patient as an individual and as a whole, and identifying problems and planning care accordingly, was quite exciting. These interviews are not discussed at length here. Observations were made on nurses' interaction and communication with the patients and their relatives. Patients were also interviewed about their opinion and satisfactions. As such interviews and observations were undertaken in each phase, they will be discussed collectively in a later chapter.

Introducing case presentations

During this phase, the researcher met the nurse managers every morning and evening, and the steering group members more often as they were seen in the study wards. Towards the end of this phase, the researcher first discussed with the nurse managers and then with

the ward sisters the possibility of introducing case presentations in the wards (see Figure 6.2). Since there were fewer patients, the wards were less busy and the nurses were enthusiastic about identifying problems and writing nursing care plans, the researcher thought that it was a suitable time. Therefore, case presentations were introduced in N.C.H. C.M.C. already had a regular ward teaching programme, but they followed a medical model. The researcher helped the C.M.C. ward sisters and the tutors to reorganise their ward teaching schedule, and shifted the emphasis from a medical model to a patient-centered approach.

As the planning phase was in progress, the ward work started changing. Nurses were spending more time with patients, assessing and writing nursing care plans, and this resulted in better interaction between nurses and patients. Some of the doctors and other hospital workers started talking about this change. The kind of comments included:

> "Nursing too is changing."

One of them said:

> "It is not just giving medicines and injections and taking TPR. Nurses are spending more time with patients and finding out their problems."

Another said:

> "Nursing is also taking a scientific approach. This new approach sounds very good. I never thought that nursing had anything to do with patients' problems and scientific approach."

Yet another said:

> "There is a growing interest among nurses about patients' health and illness."

Just about the same time, one doctor started questioning why nurses had to obtain patients' personal and social histories. Since the nurse leaders were also confronted with these questions, they were able to explain to the doctor that the only reason for collecting the data was to understand the patient and thus plan better nursing care. Unless the nurse knew what kind of a house the patient was living in, whether the patient had toilet facilities or a safe water supply, she could not plan nursing care, including health teaching. If the patient did not have a toilet at home, if he were using an open space for defaecation and walking bare foot, there was every chance of getting hook worm infestation. If that very patient was admitted with abdominal pain and also anaemia, this information would be a great help in identifying that patient's problems and in planning care, including health teaching.

Since these confrontations were brought to the researcher's notice, she made a point of having a friendly talk with the doctors about systematic nursing. Later on she had some group meetings with the doctors, where she discussed her research and its implications.

On the whole, the nurses enjoyed writing nursing care plans. Although a period of three weeks was planned for this phase, the nurses were eager to move on to the third phase and seemed to be ready, so it was decided to go ahead with the third phase.

Summary of phase two

A period of two weeks was spent in each hospital on the planning phase. Altogether 49 nurses participated in this phase, 22 in N.C.H. and 27 in C.M.C. Nursing care plans were written for 61 patients, 25

in N.C.H. and 36 in C.M.C.. Of this number 39 were medical, 18 surgical and four gynaecological patients. The researcher had meetings with the nurse managers, steering group members and the participating nurses before starting, and on completion of this phase. Observations were made on nurse-patient interaction and communications. Resistance by a doctor was dealt with by increased communication. There was a reduction in the number of patients, particularly surgical patients, owing to the absence of the surgeons, and also to the harvest season. Some of the participating nurses found it difficult to write the objectives and nursing interventions. A few senior nurses experienced difficulty in writing nursing care plans as they were so used to task-nursing. The researcher spent one week in each hospital helping the participating nurses. She introduced case presentations in N.C.H. and shifted the emphasis from a medical model to patient-centered approaches in C.M.C.

Phase Three - Implementation

The third phase of systematic nursing deals with the implementation of planned nursing care. The objective was to help nurses give planned care to their patients. During this phase nurses carried out nursing assessment of their patients, wrote nursing care plans and gave planned care. The nurses were accountable for the care given to their patients. The ward sister had an important role in co-ordinating all these activities. Three weeks was planned for this phase in each hospital.

Preparation of nurses

The researcher had meetings with the nurse leaders, steering groups and the participating nurses. The purpose and plan of this phase was discussed. She stressed the importance of practising intellectual, interpersonal, decision-making and communication skills. By now the participating nurses had gone through the first two phases and were more confident in proceeding with the third phase.

Table 6.10 describes the number of ward sisters, trained nurses and general nursing students participating in the implementation phase in both N.C.H. and C.M.C.

Table 6.10: Number of Nurses Participating in the Implementation Phase

Status	N.C.H.	C.M.C.	Totals
Ward Sisters	3	4	7
Trained Nurses	9	12	21
General Nursing Students	10	9	19
Totals	22	25	47

The number of ward sisters participating during this phase was reduced to seven as two of the ward sisters in C.M.C. left to take diploma courses prior to the start of this phase. This did not affect the wards much as two of the senior trained nurses who were already working as relief ward sisters were promoted to ward sister rank. Since they had already been managing the wards in the absence of the ward sisters, in one shift or the other and also during the

ward sisters' vacation, their promotion to ward sister rank did not affect the study. These sisters participated in the first and second phases, and were also prepared for the implementation phase. Although there was a change in the staff rotation in N.C.H. and the student rotation in C.M.C., the participating nurses changed only between the study wards, and this did not affect the implementation phase. The researcher went to all the study wards to meet and to explain to the participating nurses the objectives and the plans of this phase. The researcher, the sister tutors, and the ward sisters helped the participating nurses choose the patients for this phase.

Introducing the third phase

The ward sisters organised the nursing work within the system of patient allocation. They quite willingly imparted their knowledge and information to the participating nurses. The sister tutors helped the general nursing students and also the trained nurses to relate theoretical knowledge to practical situations. For example, one of the participating nurses did a nursing assessment on a patient who was diagnosed as having 'Renal Failure'.

In the assessment the trained nurse stated that Mr. N. gave a history of oedema of face and feet and also reduced output of urine for the past three months. The nurse also made an assessment on Mr. N's activities of daily living. She stated that Mr. N looked weak, and that he said he was troubled by a cough and breathlessness at times. He also said that he was passing less urine than usual. These symptoms were worrying and he wondered if he would get better

or not. The nurse identified the following problems on the date of admission and set the nursing objectives.

Problem	Objective
oedema	reduce oedema
cough and dyspnoea	relieve cough and dyspnoea
upset about prognosis	give psychological support

The nurse had written nursing interventions to meet each objective stated. Here the researcher has selected only one problem to relate how the nurse planned and gave nursing care to Mr. N. This example is not a complete nursing care plan on its own, as explained earlier.

Problem	Objective	Care Plan
Oedema	Reduce oedema	Put Mr. N. to complete bedrest and make him comfortable
		- discuss diet and treatment ordered with Mr. N. and his family and explain the implications
		- give injection Lasix 1 amp. stat
		- prepare Mr. N. for intravenous infusion Manital 1 pint
		- give him bedpan at regular intervals
		- restrict fluids to 500ml/24 hours
		- measure intake and output and record
		- give him salt free diet
		- give low protein diet
		- test urine for albumen once daily
		- weigh the patient every morning and record.

The nurse discussed this nursing care plan with her sister tutor and the ward sister. The rationale behind each action was explained to the patient and his family. Once the plan was made, it was com-

municated to the nurses concerned with the particular patient's care, to the patient and to his family. The planned care was implemented.

The Nursing Care Plan did not describe the patient's problems adequately, for example, stating that he had oedema, instead of stating that it was oedema of face and feet. Similarly the objectives and the nursing interventions did not seem to be adequately formulated. Although the nursing care plan did not describe the individual care given to Mr. N. the nurse's notes showed evidence of nursing care being individualised. The nurse described that the patient was weak and had dyspnoea and therefore complete bedrest was provided. The nurse and the patient's family helped him with bathing and feeding, and gave him bedpans. A fluid chart was maintained. The amount of urine passed within 24 hours on one particular day was recorded as 830cc. The nurse understood the rationale behind the treatment, restricting salt and fluids to avoid sodium and water retention. She explained this to the patient and his family.

The nursing care plan written by this nurse did not seem to be an ideal one, but this did not suggest that the nursing care was not individualised. Firstly, it was the initial stage for nurses in writing nursing care plans. Secondly, nurses might have found it difficult to express themselves adequately in the English language, especially in writing precise and meaningful statements. Nevertheless, the patient and his family were included in the care planning, and every attempt was made to individualise patient care.

Another participating nurse had written a nursing care plan for a patient who was undergoing abdominal hysterectomy. She had identified the actual and potential problems, and had written a pre-

operative and post-operative nursing care plan. She discussed this care plan with her ward sister, the patient and the relative. She put the plan into action and also communicated the plan to the nurse in the next shift, and that nurse communicated to the night nurse. One problem the nurse identified was anxiety about surgery, so the objective stated was to lessen this anxiety by implementing the planned care thus:

- explain to the patient about the operation
- allow her to talk and express her feelings
- show genuine interest by listening to her
- reassure the patient
- introduce her to another patient who had undergone similar surgery and allow them to talk together.

In order to know more about the patient's feelings and to help the patient to overcome this anxious state of mind, the nurse encouraged the patient to talk and express her fear of undergoing surgery. She showed genuine interest by listening to the patient and reassuring her. The nurse explained to the patient about hysterectomy and arranged for her to meet another patient who had already undergone similar surgery and was making good progress. This seemed to alleviate a lot of anxiety.

The nurse had listed other problems such as post-operative complications. The objective was to prepare the patient adequately to prevent post-operative complications and the nurse had a list of interventions concerning pre-operative preparation. She was able to carry out some of these activities but there were some which required the night nurses' assistance. While giving handover reports she

communicated the plan to the night nurse and reported all the interventions that had been implemented during her duty time, and then gave the plan to the night nurse in order to ensure continuity of care.

Documentation in phase three

After implementing the planned nursing care the nurses documented the care on the nurses' record forms in the patient's profile. The same form was used for writing the patient's progress notes. The ward sister co-ordinated the nursing care plan activities in order to provide individual patient care. The participating nurses learned to update the care plans with the help of the researcher and their tutors. The ward sisters also updated them at times. The participating nurses always discussed plans with their ward sisters and received the necessary help in updating the care plans. A minimum of four consecutive care plans was written for each patient.

Altogether 82 patients were involved in this phase, 28 in N.C.H. and 54 in C.M.C. Table 6.11 describes the number and type of patients involved in the implementation phase. It also indicates the number of male and female medical and surgical patients and gynaecological patients in female wards in both hospitals.

Table 6.11: Number and Type of Patients Involved in the Implementation Phase in N.C.H. and C.M.C.

Type of Patients	N.C.H.	C.M.C.	Total
Male Medical	12	18	30
Male Surgical	2	6	8
Female Medical	9	10	19
Female Surgical	4	11	15
Gynaecological	1	9	10
TOTALS	28	54	82

Table 6.12 describes the number of male medical and surgical, and female medical, surgical and gynaecological patients, involved in the implementation phase in two study wards in N.C.H.

Table 6.12: Number of Patients Involved in the Implementation Phase in N.C.H.

Type of Patients	M. Med. & Surg.	F. Med. & Surg.	Total
Medical	12	9	21
Surgical	2	4	6
Gynaecological	-	1	1
Totals	14	14	28

Table 6.13 describes the number of male medical and surgical, and female medical, surgical and gynaecological patients involved in the implementation phase in three study wards in C.M.C.

Table 6.13: Number of Patients Involved in the Implementation Phase in C.M.C

Type of Patients	M. Med & Surg.	F. Med. & Surg.I.	F. Med & Surg. II	Total
Medical	18	2	8	28
Surgical	6	5	6	17
Gynaecological	-	7	2	9
Totals	24	14	16	54

Table 6.14 describes the total number and type of patients involved in the implementation phase in N.C.H. and C.M.C. The number of surgical patients in N.C.H. had fallen because the surgeon had gone to the USA for three months.

Table 6.14: Total Number of Patients Involved in the Implementation Phase in N.C.H. and C.M.C.

Type of Patient	N.C.H.	C.M.C.	Total
Medical	21	28	49
Surgical	6	17	23
Gynaecological	1	9	10
Totals	28	54	82

Introducing bedside reports

During this time the researcher felt that it was the right time to introduce bedside reports in N.C.H., as this would prepare the participating nurses for the next phase - evaluation. Therefore

bedside reports were introduced in N.C.H. The researcher went to the wards every morning and every night and helped both day and night nurses with these. Then the researcher went to C.M.C to help the participating nurses there. They were already practising bedside reports within a medical model. So the researcher taught them how to give individualised and meaningful bedside reports not forgetting to maintain confidentiality regarding the patient (see Figures 6.3 and 6.4).

The nurses experienced increased interest, enthusiasm and satisfaction when giving planned, individualised care to their patients. Patients and their families too were happy that the nurse really took an interest in caring for them. The researcher spoke to a number of nurses, patients and their families and also to some doctors to find out their opinions about this new approach. The interviews will be discussed in a separate chapter, but one statement made by a doctor is noted here:

> "I feel that the nurses got the grip of patient-centered approaches. They are viewing the patient as an individual and a total being."

This phase was introduced over a period of three weeks in each hospital. The researcher spent one week in each hospital helping the participating nurses.

Summary of phase three

Introducing the third phase, implementation, took a period of three weeks in each hospital. Altogether 47 nurses participated in this phase, 22 in N.C.H. and 25 in C.M.C. Eighty-two nursing care plans had been formulated, 28 in N.C.H. and 54 in C.M.C. The nurses

Figure 6.3 Reports at the nurses station

Figure 6.4 Bedside reports: involving the patient and his relative

were helped to exercise intellectual, interpersonal, decision-making and communication skills. The main emphasis was on giving planned care to patients, which was individualised patient care. The ward sister, as well as the participating nurses learned to update the nursing care plans. Nursing care given was documented and participating nurses realised that they were accountable for the care given to their patients. Handover between nurses in each shift, and between nurses and ward sister, was practised. Bedside reports were introduced in N.C.H. during this phase, and in C.M.C. the emphasis was shifted to individualised patient reports. Nurses appeared to be very interested in and enthusiastic about practising systematic nursing. Nurses and patients expressed great satisfaction with the care given and received. There was encouragement from the doctors. However, some of the participating nurses faced problems with documentation. Help was offered in writing precise and meaningful statements.

Phase Four - Evaluation

One phase of systematic nursing leads to the next, and the phases are ongoing and cyclical. Evaluation was the last phase introduced. The objective of this phase was to help nurses to evaluate the actual outcome of care in the light of expected outcomes. If the objectives were not achieved, a reassessment had to be made and nursing care plans had to be modified. This phase also helped the participating nurses to find out which nursing interventions appeared to be more appropriate in solving a particular problem. During this phase, the participating nurses were expected to write statements of the

patients' response to the nursing care they received. These were outcome statements and gave completeness to the nursing care plans. They would also help the nurses to assess whether the objectives set had been realistic and achievable; and whether or not the nursing care had brought about the desired change. Selected patients and nurses were actively involved in this phase. Patients participated in the evaluation of their care during bedside reports. A period of three weeks was planned for this phase.

Preparation of nurses

The researcher had meetings in the usual manner with the nurse managers, steering groups and the participating nurses, to explain and discuss the plan for the evaluation phase. She went to the study wards to find out how many patients were in each ward. What was expected of them was explained to the participating nurses during this phase. The nurses were first to assess their patients, write nursing care plans, implement the planned care and then evaluate the outcome of care given. A period of three weeks was planned for the evaluation phase. But of course before starting with this phase, it was necessary to clear up any doubts that the nurses may have had about the evaluation phase.

Forty-seven nurses participated in this phase, 22 nurses from N.C.H. and 25 nurses from C.M.C. Table 6.15 indicates the number of ward sisters, trained nurses and general nursing students participating in the evaluation phase in the two hospitals.

Table 6.15: Number of Nurses Participating in the Evaluation Phase

Status	N.C.H.	C.M.C.	Totals
Ward Sisters	3	4	7
Trained Nurses	9	12	21
General Nursing Students	10	9	19
Totals	22	25	47

Introducing the fourth phase

The evaluation phase was introduced in N.C.H. first and then, after a week, in CMC. With the help of the ward sisters patients in each study ward were selected. Nurses in both hospitals were able to make outcome statements of patients' response against the objectives set. Some examples are given here.

One nurse after assessing a patient suffering from lumbago stated that one of the nursing problems was 'severe back pain radiating to the right leg'. The nursing objective was to reduce the back pain. She had written the following nursing care plan:

- provide board bed with mattress to Mrs. L.
- put Mrs. L. on strict bed rest
- give analgesics as per doctor's orders

  Tab. Paracetamol 1 t.d.s.

  Tab. Trufen D1 t.d.s.

  Inj. Calmpose p.r.h.
- give infra-red light
- prepare for application of traction.

The nurse put Mrs. L. on complete bedrest and assisted her with her physical needs, such as bathing and using the bedpan, since the patient could not attend to these needs herself. Also the nurse gave her the medication ordered by the doctor and assisted with the application of traction. When the nurse checked with the patient, there was no relief of pain on the day of admission. The nurse involved the patient each time in assessing the nature, intensity and duration of the pain, and whether medication reduced the pain or not. On the third day, the nurse again discussed the pain with the patient, and the patient said that it was slightly reduced. Therefore, the nurse wrote an outcome statement 'back pain slightly reduced'. It should be noted that there were no pain assessment scales in these hospitals.

Another nurse assessed a patient whose symptom was pain in the lower abdomen. The problem stated was bleeding per vagina at 6.30pm. The objective was to 'minimise bleeding'. The nursing care plan written was:

- provide complete bed rest
- raise the foot end of the bed
- check BP, pulse Q 15 mnts.
- give Inj. Methargin I.M. (doctor's order)
- assist doctor with I.V. blood transfusion
- save all the pads
- observe urine for blood.

At 10.00pm on the same day, she had evaluated the care given and written an outcome statement: 'bleeding minimised'. After two days she had written another outcome statement: 'no bleeding'.

Some nursing interventions need to be evaluated immediately. Bleeding was a life threatening problem, so the nurse checked the vital signs every 15 minutes. She also carefully examined the pads. An injection of Methargin was given to control bleeding and blood was given to replace the blood loss. Three and a half hours after implementing the planned care, the nurse was able to evaluate and report that the bleeding had become minimal. As evaluation was an ongoing process, the nurse checked the pads, and after two days reported that there was no bleeding. The first objective was to 'minimise bleeding', then she reassessed and set another objective, 'no bleeding'.

While evaluating the outcome of care given the nurse made observations on various factors, such as pads and objective measures such as pulse and temperature. She involved the patient in evaluation by obtaining some information and comparing the data with expected outcome. The researcher found that the nurses were able to evaluate the outcome of care given. For example, nursing care plans written for patients who had fever, headache, abdominal pain or dyspnoea were evaluated in a short time, some 30 minutes after giving an analgesic or other medication. Care plans written for fracture patients and or stroke patients, and other long term care plans were evaluated periodically. Evaluation provided feedback to reassess nursing problems and to formulate new objectives when a problem was not resolved or a new problem was identified.

Since the bedside reports were introduced towards the end of the implementation phase, the evaluation phase had become more meaningful. The patients and sometimes their relatives too participated in evaluating the outcome of care. One of the ward sisters was a little

reluctant about bedside reports, as she felt that the patient would come to know about his diagnosis and treatment and would understand what nurses were discussing. The researcher explained to her the importance of bedside reports and the value of involving the patient in it. Even though doctors and nurses perhaps did not want the patient to know his diagnosis, it was still possible to involve patients in discussing their care.

However, nurses now appreciated involving the patients in bedside reports, because they made valuable subjective contributions as to whether the pain was better or worse, the diarrhoea had stopped or not, the patient was feeling better or weaker and so on. Nurses were able to perceive what the patients' expectations were. Nurses were enthusiastic to continue with bedside reports. After some time the researcher noticed a change in the nurses' language. Nurses started talking in terms of the individual patients' problems. One such example was a night nurse giving a report to the ward sister and the other nurses. She said:

> "Mr. X had problems last night, one problem was he had a fever 102° and the second problem was a headache.Cold compress applied, Tab. Aspirin gr.10 given, gave him plenty of fluids. Mr. X's fever came down, now temperature 99°F. No headache. No other problems."

Then they moved to the next patient and the nurse gave the report. The ward sister interrupted and asked the night nurse whether the individual patient had any other problem. During this time, the researcher helped the nurses to reassess the nursing problems and modify care plans.

In giving examples of writing nursing care plans, implementing planned interventions, or evaluation of the outcome of the care given

to the patient, the researcher did not discuss the entire nursing care plan. She chose only one problem, intervention or evaluation at a time, to illustrate how the nurses went about systematic nursing. This did not mean that nurses identified only one problem, either physiological or psychological. The nurses identified physiological, psychological, social and spiritual problems and planned care accordingly. Even though the documentation was inadequate, the nursing care plans written by the nurses suggested that nurses gained a holistic view of patients' care. The participating nurses seemed to understand that a patient reacted as a whole to every nursing action. What was done to one aspect affected the others and the whole person. It was a paradox to describe nursing actions as affecting only one aspect of the whole. Nevertheless, independent nursing actions could be planned, bearing in mind the holistic effect of each nursing action. This seemed to help solve the multi-dimensional problems of the person.

Many of the nursing interventions were implemented to solve problems concerning the activities of daily living. These interventions appeared to help relieve symptoms, maintain optimum health, and adapt to changed health status or rehabilitate to normal functions.

Often the unknown seemed to be the cause of psychological problems. Emotional problems were often associated with physiological, social or spiritual problems. Talking with the patients and encouraging them to talk about their fears, concerns and doubts seemed to alleviate some of their emotional problems. Nurses also noticed that some emotions were too deep or too moving for a patient to talk

about. It was found that being supportive to the patient and showing concern was the appropriate intervention during such times.

The counselling type of approach seemed to help solve spiritual problems. Nurses were able to help patients sometimes. The chaplain and women preachers also helped them with their spiritual problems.

Most of the patients' problems were identified by the nurses. However, it should be noted that the nurse was also an individual and a person. There were problems which the nurses failed to identify. Patients perceived some problems and failed to do so with others. It appeared important that the nurse validate the problems identified in order to plan his care.

Documentation in phase four

Documentation was carried out in all four phases of systematic nursing. The date and time and the outcome statement were written by each nurse alongside the nursing intervention. All the columns in the nursing care plan form were filled in by the nurses during this phase, that is, they stated the nursing problems and the objectives, wrote the nursing care plan, evaluated the outcome of care given and signed at the end.

A total of 90 patients, 36 patients in N.C.H. and 54 patients in C.M.C. were involved in the evaluation phase. Of this number 58 were medical, 24 surgical and 8 gynaecological patients. The number and type of patients involved in this phase in each hospital are presented in Table 6.16.

Table 6.16: Number and Type of Patients Participating in the Evaluation Phase

Type of Patients	N.C.H.	C.M.C.	Totals
Male Medical	17	21	38
Male Surgical	-	10	10
Female Medical	12	8	20
Female Surgical	5	9	14
Gynaecological	2	6	8
TOTALS	36	54	90

By this time, the surgeon in C.M.C. had come back. But the surgeon in N.C.H. was still away. This affected the number of surgical patients in N.C.H, especially in the male ward. The harvest was over and more patients started coming to the hospitals.

Altogether, 36 nursing care plans were evaluated in N.C.H. for the outcome of care given to the patient. Table 6.17 describes the number of medical, surgical and gynaecological patients involved in the evaluation phase in two study wards in N.C.H.

Table 6.17: Number of Patients Participating in the Evaluation Phase in N.C.H.

Type of Patients	M. Med. & Surg.	F. Med. & Surg.	Totals
Medical	17	12	29
Surgical	-	5	5
Gynaecological	-	2	2
Totals	17	19	36

In all, 54 nursing care plans were evaluated in C.M.C for the outcome of care given to the patients. Table 6.18 describes the number of medical, surgical and gynaecological patients involved in evaluation phase in these study wards in C.M.C.

Table 6.18: Number of Patients Participating in the Evaluation Phase in C.M.C.

Type of Patients	M. Med. & Surg.	F. Med. & Surg. I	F. Med & Surg. II	Totals
Medical	21	3	5	29
Surgical	10	4	5	19
Gynaecological	-	3	3	6
Totals	31	10	13	54

Table 6.19 describes the total number of medical, surgical and gynaecological patients in the evaluation phase in N.C.H. and C.M.C.

Table 6.19: Total Number of Patients Participating in the Evaluation Phase in N.C.H. and C.M.C.

Type of Patients	N.C.H.	C.M.C.	Totals
Medical	29	29	58
Surgical	5	19	24
Gynaecological	2	6	8
Totals	36	54	90

At the end of this phase nurses in N.C.H. presented a 'panel discussion on systematic nursing' and 'role play' by the C.M.C. nurses. The meetings were attended by doctors, nurses and other hospital workers.

Summary of phase four

A period of three weeks was spent on the evaluation phase. A total of 47 nurses and 90 patients in the two hospitals participated in this phase. The main emphasis was on the evaluation of the outcome of nursing care given to patients. The outcome of nursing interventions was evaluated against the objectives set. The outcome statements were documented on the nursing care plan form. Bedside reports were carried out and patients were also included in evaluating the care given to them. Sometimes the families also participated. Nurses were able to reassess the patients' problems and modify the care plans accordingly. New objectives were formulated and new care plans were written when the problems were not resolved.

Although nurses were able to write the outcome statements in the light of the nursing objectives formulated, these looked inadequate. The examples of outcome statements given in this section did not show clear evidence of individualised evaluation of patient care. One of the major difficulties confronted by the participating nurses was in writing meaningful outcome statements. This was because of the language problem. Half of the participating nurses experienced this problem. The other uncertainties experienced by the nurses were to do with how often evaluation and updating of care plans should be

done. Since the nurses had only recently been introduced to systematic nursing, they had not yet gained sufficient experience in the evaluation phase. The nurses needed more help and guidance from their tutors and ward sisters during this phase. Therefore, a period of four weeks was planned for the maintenance phase in which nurses could practice all the four phases of systematic nursing. It was hoped that the nurses would gain some more experience and confidence to address these issues adequately.

IMPORTANCE OF DOCUMENTATION

The importance of documentation was emphasised throughout the implementation of systematic nursing. In phase one, the nursing Assessment Form was used (see Appendix 2a and b) to document the patient's personal, medical and social history, and also information on the activities of daily living. The participating nurses identified patients' physiological, psychological, social and spiritual problems from the data collected.

The Nursing Care Plan (see Appendix 3) was used during the planning phase of systematic nursing. The participating nurses first listed the patients' nursing problems according to their priority, wrote objectives against each problem, and then identified nursing interventions to meet the objectives. Each Nursing Care Plan contained a list of problems, objectives and nursing interventions. The plans were short term, long term or specific plans, depending on the nature of the problem, the condition of the patient and the length of hospitalisation. A minimum of four consecutive care plans was written for each patient.

During the third phase the participating nurses implemented the planned intervention and documented the care that was given to their patients. Nurses' record forms in the patients' profile were used for this purpose. The same form was used for writing the patients' progress notes. The ward sister co-ordinated the nursing care plan activities in order to provide individual patient care. The participating nurses learned to update the care plans with the help of the researcher and their tutors. The ward sisters also updated them at times. The participating nurses always discussed plans with their ward sisters and received the necessary help in updating the care plans.

The evaluation column on the Nursing Care Plan was used for documenting the outcome of care given to the patients. The date and time and the outcome statement were written by each nurse against the nursing interventions. All the columns in the Nursing Care Plan Form were filled in by the nurses during the evaluation phase. They stated the nursing problems and the objectives, wrote the nursing care plan, evaluated the outcome of care given and signed it at the end.

MAINTENANCE PHASE

A period of four weeks was allowed for the maintenance phase. By the first week of December 1985 the evaluation phase was over and the participating nurses in both hospitals were ready for the maintenance phase. The aims were threefold: firstly, that this phase would enable the nurses to practice all four phases; secondly, that it would also provide more learning experiences and exercises in order

to enable nurses to practice systematic nursing more confidently; and thirdly, to evaluate the outcome of the project by means of obtaining the views and perceptions of nurses and patients regarding systematic nursing. During this phase it was also possible to assess whether systematic nursing made any difference to the nurses' knowledge about their patients, interactions and communications. The study also aimed at finding out about the satisfactions and dissatisfactions of nurses and patients with the care given by and to them. No attempt was made to measure these phenomena; but the interviews and observations made by the researcher and the subjective evaluation of patients and nurses will be discussed in a separate chapter.

Since the main objective of this study was to introduce systematic nursing, the nurses were expected to continue with it even after the withdrawal of the researcher from the hospitals. It was expected that the ward sisters would organise their work within the patient allocation system, and maintain systematic nursing in their wards. The nurses would continue systematic nursing with the required help from the ward sisters and the sister tutors.

The same number of nurses as were in the fourth phase participated in this phase. The patient numbers had fallen towards the end of this phase, as it was the festive season, but this enabled the nurses to gain more experience in using systematic nursing. There were 60 patients involved in this phase. All the patients in the study wards were involved in this phase, except those who were admitted for investigations, who stayed only for a day or two.

During this phase the nurse first did the assessment, then wrote the nursing care plans, implemented the planned care and finally

evaluated the outcome of care given. The tutors and the ward sisters offered the necessary help and guidance to the participating nurses. Nurses seemed to gain more experience and confidence in writing nursing care plans and evaluating the outcome of care given in the light of objectives formulated. There appeared to be an improvement in documentation.

SUMMARY

Implementation of systematic nursing in phases took 14 weeks in each hospital. Altogether five wards, two male medical and surgical wards and three female medical and surgical wards were involved in the change process. The first two phases were introduced over a period of two weeks each, and the third and fourth, over three weeks each. A period of four weeks was spent on the maintenance phase.

There were 56 nurses involved in phase one, and 43 in the remaining three phases and they participated throughout the implementation of systematic nursing. The number of patients involved in phase one was 72, in phase two 61, phase three 82, and phase four 90. There was a reduction in the patient number during phase two, owing firstly to the harvest and secondly to the fact that the surgeons were away on leave. The number of surgical patients had fallen in N.C.H. during phases three and four as the surgeon went to the USA for three months. However, problems such as shortage of trained nurses, apprehension of a few patients to give their social history, and resistance by a doctor were also confronted. Some of the participating nurses found it difficult to write objectives and nursing interventions. Similarly some found it difficult to write meaningful outcome statements. This was because of the English language problem.

Before commencing, and on completion of each phase, the researcher had formal and informal meetings with the nurse managers, steering groups and participating nurses in each ward. The main emphasis in phase one was on nursing assessment and identifying nursing problems. A structured Nursing Assessment Form which included activities of daily living was used for this purpose. Phase two dealt with writing nursing care plans. The nurses first carried out nursing assessment, identified nursing problems, prioritised them and then wrote nursing care plans. Nursing Care Plan Forms were used for this purpose. The nursing care plans contained a list of patients' nursing problems, nursing objectives for each problem and a list of nursing interventions to be carried out in order to solve the problems. The nursing care plans were communicated to the other nurses in the wards during the change of each shift. Planned nursing interventions were implemented during phase three. The participating nurses gave planned, individualised care to their patients. Phase four was concerned with evaluating the outcome of nursing care given to patients. The actual patient outcome was compared with the expected outcome. This gave feedback which was necessary in order to reassess, to decide on further action or to modify care plans in order to improve nursing care. A number of skills - intellectual, observation, decision making, interpersonal and communication - were practised throughout the implementation period. One phase of systematic nursing led to the next and it was a cyclical process. All four phases were carried out during the maintenance phase. This helped the nurses to gain more confidence in practising systematic nursing.

Documentation was emphasised in all four phases and in N.C.H. patients' records were kept in separate files. In C.M.C. these were kept along with patients' profiles. In both hospitals, these records were kept in the nurses' stations. Progress notes were written on the existing nurses' records.

Case presentations were introduced in N.C.H. during the second phase and in C.M.C. the emphasis was shifted from the medical model to patient-centered approaches. Bedside reports were introduced during the implementation phase in N.C.H., and the same were made more meaningful by shifting the emphasis to individual and patient-centered approaches. In C.M.C. patients and their families also participated in planning their care. Patients were included in evaluating the outcome of care given to them.

The researcher was able to gain co-operation from all the nurse managers, steering group members and participating nurses, who greatly assisted in the implementation of systematic nursing. The steering group assumed the role of the internal change agents while the researcher was the external change agent. Negotiation, demonstration of competence in knowledge, practice, interpersonal skills, communication skills, continuous motivation, and encouragement appeared to be the important strategies used in the change process.

Nurses and patients were interviewed from time to time on their satisfactions and dissatisfactions with this new approach in nursing. The researcher travelled alternate weeks between the two hospitals to ensure that each phase of systematic nursing was successfully implemented and carried out. Help and guidance were offered in each phase as and when they were required. Under these circumstances the implementation of systematic nursing was a successful change.

CHAPTER 7

STABILISING CHANGE

INTRODUCTION

This chapter deals with two important phases of change, firstly stabilising change and secondly the outcome of change. Since the purpose of this study was to introduce systematic nursing in two hospitals in India, an integral aim was to stabilise the change that took place. In order to achieve this goal internal change agents were prepared. Support groups were established and help and support was offered with individual learning needs. The introduction of the record system was closely supervised by the steering group members with the aim of stabilising systematic nursing. It was also intended to stabilise other changes introduced such as case presentations and bedside reports. The nurse managers were expected to co-ordinate the change activities with the help of the steering group members. The steering group members as internal change agents were also expected to co-ordinate the activities of support groups. It was made clear to the nurse managers and the steering group members that they were responsible for establishing the change that has been already introduced. The researcher offered only minimal help during this phase.

This chapter also describes the outcome of change. Since the innovation itself was a major aspect of the project, evaluation of the effects of change was an ongoing process in this study. Nurses and patients were questioned about the changes that had occurred and their satisfaction and dissatisfaction with systematic nursing. In Appendix 12 the written reports of steering group members on perception of outcome of change are appended.

STABILISING CHANGE

The nurse managers, the sister tutors and the ward sisters were prepared as internal change agents. Six one-hour lectures were given to them during the main study. The objective was to prepare them to help with the change process, to manage the change in the absence of the researcher and then to stabilise the change. The course covered the meaning of change, and the characteristics and the role of the change agents. See Appendix 10 for the course outline and the objectives of the course for the change agents.

With a view to stabilising change, support groups were formed from among tutors, ward sisters and participating nurses by the end of the main study. The objective was to identify and help with the individual's learning needs so that systematic nursing could be continued without disruption. The peer groups met more frequently whenever a problem arose. The steering groups co-ordinated the activities of support groups. The peer groups among nurse managers, tutors and ward sisters were able to give their critique on each individual's involvement, knowledge gained and skills obtained in systematic nursing. Each individual's performance and documentation was observed and discussions were held with the individual participating nurses. Each individual's learning needs were identified and help and support was given. Some of the trained nurses were helped with the preparation of nursing care plans. Similarly some of the trained nurses and students were helped with preparation for presenting their clinical teaching. Many of the participating nurses were helped with documentation.

Role of the Internal Change Agents in Stabilising the Change

Effective management of change was necessary to stabilise change. Group action seemed an important approach to this. The nurse managers, the tutors, the ward sisters, the trained nurses and the students, indeed all those who were involved in the change process had a role to play both as individuals and within a group.

Since the nurse managers and the researcher developed mutual trust and confidence, they were able to discuss the problems in nursing practice and nursing education more openly. As the advisory group members, they met twice during the main study. Plans for change were discussed, amendments were made, problems were solved and plans were implemented. They encouraged and ensured that the changes which were introduced were established, for example, by stabilising patient allocation, supplying the records to wards from time to time and encouraging documentation whenever they made rounds. All this was an example to the other nurses and helped to convince them that the change was not only proposed by the researcher but was also desired by the nurse managers. The nurse managers appeared to be committed to change and this contributed, to some extent, to stabilisation of change. In conjunction with the tutors and ward sisters they resolved any problem which the staff confronted and ensured that the changes introduced were continued.

Sister tutors were actively involved throughout the change process. As nurse educators, clinical supervisors and also as internal change agents, they offered maximum help and ensured that changes introduced were carried on. They organised clinical teaching along with the ward sisters. Inclusion of second and third year

general nursing students in the project made them feel more responsible for students' learning. As nurse educators, they were able to help the trained nurses and students with nursing assessment, and writing nursing care plans. Staff education programmes and Student Nurses Associations were organised where they had debates, panel discussion and role plays on systematic nursing.

Documentation was another important area in which the tutors took special interest in helping the participating nurses. On completion of the main study, nursing assessment was done for every patient that was admitted except for those who were admitted for investigations. Nursing care plans were written, planned care was given to patients and the outcome of care was evaluated. This had become a regular feature. The record system introduced was stabilised. The Nursing Assessment Form and the Nursing Care Plan had become part of the patient's profile.

Because ward sisters were key individuals in the management of the wards they played a very important role in the change process. As steering group members, they were kept informed about change plans, which they in turn communicated to the participating nurses and patients. Doctors were also kept informed about developments. The ward sisters coped with the entire change process, which included implementation of patient allocation, systematic nursing, case presentations, bedside reports and increased documentation. The ward sisters worked in co-operation with the tutors and prevented any discontinuance of the changes that were introduced. Examples were reviewing patient allocation charts every week and planning a weekly clinical teaching programme. These activities had now become regular

practices in the clinical area. A healthy competition existed between the sisters in the study wards. When case presentations were first introduced in one particular study ward, the sister in the other ward expressed her desire to start the bedside reports first in her own ward. Any plans for change were first discussed with the nurse managers and then were brought to the steering groups for further discussion and working out of practicalities. There had been a provision for modification of plans to suit the type of patients in each ward. The ward sisters were expected to express any difficulties they were facing in carrying out the changes that were introduced. There existed freedom of communication between the nurse managers, tutors, ward sisters and the researcher. This created a settled and conducive atmosphere for all those who were concerned with the change, with an integral aim of stabilising the change.

The trained nurses and the general nursing students, as participating nurses, were the important people in bringing about the change. They carried on with patient allocation, systematic nursing, case presentations and bedside reports. The plans were communicated to them from time to time.

Encouragement, support, assistance and praise were offered whenever they were needed. Periodic meetings were held by the nurse managers for trained nurses and students separately to discuss any problems they encountered. Meetings were also held at ward level by the ward sisters and tutors. The participating nurses appeared enthusiastic about being involved in the project. Freedom of communication, exchange of ideas, and a spirit of competition between the study wards seemed to boost their morale. They were eager to write

nursing care plans and looked forward to discussions with their tutors and the researcher. Similar interest was shown with case presentations. One such incident could be related here. The researcher, after a three-hour journey, arrived at one of the study hospitals and before she could even meet the nurse managers, a student came running to her and asked the researcher to attend her case presentation. The introduction of systematic nursing appeared to challenge them as they were the first nurses to work with this new approach. Caring for the individual patients and planning individualised and total care gave them a sense of satisfaction. It appeared that participating nurses looked forward to continuing the changes introduced during the course of the project. This too had contributed towards the achievement of stability of the change.

Since the hospitals had a vested interest in the proposed change, they expended energy, time and some finance and facilitated implementation of systematic nursing. The nurse managers faced some difficulties such as shortage of trained nurses, altering the staffing patterns, postponing students' affiliation to other hospitals and also resistance by a few nurses. The financial involvement was not a major factor in the change process even though printing the new records and appointing a few more nurses involved some additional financial outlay. This suggested that the hospitals were interested in maintaining the change.

Role of the Researcher in Stabilising the Change

Besides introducing the change the researcher also aimed at stabilising the change. The role of the researcher as an external

change agent appeared to be vital in the entire process of change. Among the various helping roles Lippitt (1973) states that:

> "a change agent will find himself operating along a continuum of consulting roles." (p 62)

Thus a change agent:

- persuades the client as to a proper approach
- gives expert advice to the client system
- trains the client system
- provides alternatives to the client system
- assists in the problem-solving process
- is a fact finder
- serves as a catalyst for the client system

The researcher adopted these various roles in introducing and stabilising change. This in turn appeared to enhance the individual contribution and group action through the advisory group, steering groups and support groups. It also resulted in positive attitudes towards change.

In the light of the characteristics of a change agent listed by Mauskch and Miller (1981), the researcher as an external change agent was prepared to take risks. She coped with the organisational problems and worked in co-operation with the nurse managers. The past professional experience of the researcher, both as a Director of Nursing Service and Principal of a School of Nursing, helped her to be more sympathetic and understanding of organisational problems. Having worked as a tutor she could easily identify with the tutors, as well as with the ward sisters, trained nurses and students. She travelled every other week between the study hospitals to make sure that the changes implemented were carried on. The researcher also

felt committed to the efficacy of change. Hence she tried her best to impart the new nursing knowledge, and helped the participating nurses in the wards. She tried to improve inter-personal, inter-professional and inter-departmental relationships and communication skills. She felt that she made every effort to introduce and stabilise change along with the internal change agents. She encouraged and motivated all those who were concerned with the change. Praise and commendation were given when the nurse deserved them.

Every effort was made to make documentation effective. Help was offered to nurses to write concise and meaningful statements and reassessment was emphasised. Special attention was paid to the evaluation of nursing care plans, as it could not be assessed at the time of the advisory group meeting.

The nurses were provided with information about the consequences of the change. Frequent discussions and periodic interviews helped the nurses perceive changes that had occurred. The researcher also realised that it was her responsibility to make the results of the change programme as conspicuous as possible to all those who were concerned with change. The changes that had occurred, for example patient allocation, systematic nursing in phases, case presentations, bedside reports, introduction of records and improved documentation were easily noticed by the doctors, nurse managers and others who were concerned with change. The more they were informed about the results of the change programme, the more readily they accepted the change as a permanent part of the system. They supported the project because they believed it to be worthwhile and successful and also

because they had played a part in its development and success.

In the early stages of the change process, participating nurses were dependent on the researcher for support and guidance. In the development of the planned change project, the advisory group, steering groups and support groups were formed to plan, monitor, participate in and stabilise change. Internal change agents were prepared to manage the change adequately and prevent any discontinuance. As the phases of change were introduced one after the other, the researcher made the nurses feel more responsible for the change. It was evident from the discussions that the internal change agents managed the change in the absence of the researcher, while she travelled between the study hospitals. The researcher felt that it was necessary for her to terminate her relationship as a change agent once the change was introduced and established. This would prevent the participating nurses remaining dependent on the researcher. Otherwise it would be difficult to maintain change in the absence of the researcher. Bearing this in mind, the researcher gradually withdrew her presence from the hospitals over a period of four weeks. She gave full support until the four phases of systematic nursing were introduced. When the hospitals reached the maintenance phase, that was in December 1985, the researcher spent only one week in each hospital and offered only minimal help. In the month of January 1986, she paid only one visit to each of the hospitals. By this time, the change had become an accepted part of the system. Entrusting the responsibilities to the nurse managers and the steering groups, the researcher withdrew from the hospitals.

Other Contributions of the Researcher

In order to continue with systematic nursing, it was necessary for the nurse leaders to carry on with the programme of periodic teaching to the newly recruited trained nurses and general nursing students. A copy of the course outline of systematic nursing was supplied to both hospitals. A new interest arose among C.M.C. tutors. The researcher was asked to prepare one of the C.M.C. tutors to introduce patient-centered approaches in class-room teaching; so the researcher helped one of the tutors to write a lesson plan using patient-centered approaches instead of the medical model. The tutor wrote the lesson plan for a patient with bronchial asthma, using the systematic nursing approach to care. This was a problem-solving approach and a lively discussion was generated by the tutors. Tutors were motivated to adopt this method of teaching. Thereafter every tutor prepared a model lesson using a problem-solving approach and presented it to the other tutors before they actually taught it to their students. The Nursing Superintendent of the C.M.C. hospital had also asked the researcher to design standard pre- and post-operative care plans for their surgical patients. This was done, and the standard care plans were in use in surgical wards in C.M.C. Copies of the standard care plans were supplied to N.C.H. A daily care plan was also designed by the researcher for the nurses to use.

The general nursing students in these two hospitals were expected to write 15 nursing care studies (five medical, five surgical and five paediatric) to meet the requirement of the Board of Nursing Education, CMAI, South India. The students in both hospitals were

using the Assessment Forms on activities of daily living as well as Nursing Care Plan Forms, as formats for writing their care studies.

OUTCOME OF CHANGE

Outcome of change is concerned with the assessment of the end results of the change. The purpose of this study was to introduce systematic nursing in medical and surgical wards of selected hospitals in India. In order to introduce systematic nursing the following change objectives were formulated at the end of the preparatory study:

- to prepare nurses adequately to implement systematic nursing, this included formal class-room teaching and informal individual and group teaching in the wards
- to introduce and stabilise patient allocation
- to form advisory group
- to form steering groups
- to review and develop proper record system and introduce documentation system
- to introduce systematic nursing in phases
- to prepare internal change agents
- to establish support groups.

In light of the change objectives formulated the outcome of change was assessed. In a complex change process, it was difficult to use specific variables like nurses' values, and patients' knowledge, behaviour, attitudes and health status, in evaluating the outcome of change, as this would lead to an evaluative study in its own right. It was also difficult to measure the outcome of change in

nursing practice within the time allowed, especially when innovation itself was a major aspect of the project. This study is not an outcome study.

In this study evaluation was an ongoing process as change progressed from one phase to another. Several overall descriptive means of evaluation were adopted which included observations and interviews. A diary of incidents and interactions was kept. Written reports were collected from the advisory group and steering group members about their perceptions and opinions of changes that had occurred. Patients were interviewed on their satisfaction with systematic nursing. Nurses' records and documentation were examined.

An Overall Assessment of the Change by The Advisory Group

The advisory group met during the evaluation phase of systematic nursing for an open discussion and critical evaluation of the changes that had occurred. One of the Nursing Superintendents chaired the meeting while the other recorded the minutes and presented a written report. The following main points were discussed: patient allocation; record review; implementation of systematic nursing in phases; introducing case presentations and bedside reports; attitudes of nurses, patients and other hospital personnel regarding systematic nursing, their satisfactions and dissatisfactions; and whether they wanted the implementation of systematic nursing to other wards. The following is an account of the discussions of the advisory group meeting.

Patient allocation

In N.C.H. patient allocation was started early in 1985, after the introductory course on systematic nursing, and it was going well. In C.M.C., patient care assignment was introduced 20 years ago, but it had not always been practised since. Interest had been stimulated by the researcher's work. A random survey was done by the tutors of the activities carried out by various levels of nursing staff. Corrections were made and as a result patient allocation was being practised. The merits noted were that nurse-patient interaction was greatly improved and there was greater interest and satisfaction among nurses and patients. A possible explanation of this was that nurses were spending more time with their patients, communicating and finding out their problems. This had resulted in greater satisfaction for both patients and nurses. The interviews conducted prior to the implementation of systematic nursing also confirmed that patient allocation was being practised.

Medical staff were also satisfied with the improved nursing care and the inclusion of the spiritual aspect along with the physiological, psychological, and social aspects. This did not mean that the spiritual aspect was emphasised in preference to the physical aspect, but considerable importance was given to it. To this end there had been an increased interest in health and wholeness in Christian Hospitals in India, as described earlier in Chapter 1.

The demerit noted was that since students spent only about four to five hours in wards, they could not complete the nursing care planned. The researcher suggested that the trained nurses could continue with the nursing care not accomplished in that time. Since the hospitals

were not completely dependent on students for nursing, some degree of student status was given to the general nursing students. In one hospital, the problem of shortage of trained nurses made it difficult at times to practise patient allocation. However, every effort was made to ensure that adequate staffing levels were maintained, thereby ensuring that patient allocation was not discontinued.

Systematic nursing

Systematic nursing was introduced in phases over a period of fourteen weeks in each hospital between August and November 1985.

Nursing assessment was introduced in both hospitals. Each hospital reported that good interviewing had been developed and patients' problems identified. Nursing Assessment Forms (see Appendix 2a and b) were used for this purpose. Patients' personal, medical and social history and also information on patients' activities of daily living were collected and patients' problems were identified.

Nursing care plans were introduced and nurses were happy to carry on with them. Students were more enthusiastic but trained nurses needed more encouragement from the tutors. It was decided to ask tutors to pay special attention to participating nurses and help them to prioritise patients' problems. In addition they were encouraged to involve the patient and his family in planning his care, and then to decide on the nursing interventions.

Implementation was observed and it was found that holistic care was being given. Participating nurses were able to gain a holistic view of their patients' problems. They were able to give planned

individualised care to their patients, depending on physiological, psychosocial and spiritual problems identified. The patient's level of dependence and independence, and the willingness and ability of the family to participate in care were taken into consideration. There was a need to gain more experience in this aspect of care. The nurses were beginning to understand the concept of self care, substitute care and total care. The importance of giving an account of work done, by reporting to the ward sister what has been done and careful documentation, needed more emphasis.

Evaluation was just being introduced. The participating nurses were learning to evaluate the outcome of care given to their patients, by considering the actual outcomes in the light of expected outcomes.

Case presentation

Case presentation was introduced in N.C.H. in October, 1985 and the nurses seemed eager to participate, even the second year general nursing students with limited knowledge of English. This gave tutors excellent opportunities for follow up. The doctors showed a great deal of interest in this aspect of the project. One doctor participated in teaching and prioritising patients' problems. Plans for weekly case presentations were being made in C.M.C. Relevant health teaching and group teaching were also planned: emphasis was shifted from the medical model to patient-centered approaches.

Bedside reports

Bedside reports were introduced in N.C.H. in August, 1985. This was done for sick patients especially, and was found helpful. In C.M.C. bedside reports were given for all patients. Since the emphasis was shifted to patient-centered approaches these appeared to be more meaningful now. Patients were being involved.

Records

N.C.H. was satisfied with assessment forms and nursing care plan forms in use. The hospital had introduced various new charts between August 1985 and November 1985. These included a medicine chart, a fluid chart and a nurses' report chart. Plans were under way for introducing a medical assessment form. At that time the Nursing Assessment Forms and the Nursing Care Plan Forms were being used in C.M.C. The medical assessment form was reviewed in order to prevent unnecessary repetition of data. Documentation had improved but needed more attention and care. Tutors were asked to pay special attention to this area and help students.

Views of nurses and doctors towards systematic nursing

In N.C.H. nurses and some doctors expressed satisfaction that patients were being given better nursing care. Patients' needs were met, nurses spent more time with their patients, nurse-patient interaction and communication improved. Nurses' knowledge about their patients improved. Interest was shown in systematic nursing.

Initially the attitudes of nurses at the top levels in C.M.C. had been mixed. Doctors had expressed fear that increased documentation

would take nurses away from the bedside, but their attitude soon changed when they found that, through a good working knowledge of systematic nursing, nurses were in fact more often with their patients. Nurses were more motivated to be aware of patients' needs and were able to demonstrate their knowledge. Both hospitals felt satisfied with the implementation of systematic nursing and wanted to to continue with it.

Views of the patients

Patients in both hospitals expressed satisfaction. No dissatisfaction was reported. Patients were happy that they were assigned to individual nurses and that nurses spent more time with them, found out their problems and planned their care accordingly.

Other changes made from December 1984, to November 1985 - N.C.H. and C.M.C.

In N.C.H. all the above changes had been introduced, namely patient identification (bed numbers were introduced), patient allocation, systematic nursing, bedside reports, case presentations, introduction of new records and improved documentation. In C.M.C. patients had been separated into various sections such as medical, surgical, paediatrics and all of the changes mentioned above had been introduced.

Stabilising change

It was resolved to have a steering group meeting twice each month to share problems encountered, plan for clinical teaching and ensure that systematic nursing was continued. The steering group was

expected to continue to motivate the trained nurses and students through support groups.

Wider scope of implementation

At that time, systematic nursing had been implemented only in the medical and surgical wards. However it was hoped that it would be possible to extend it to paediatrics and maternity wards. This would have to be planned as staff became available.

The researcher informed the advisory group that she would call for more information at a later stage. Hence they were requested to continue to make further assessment.

Comments of the Researcher on Views of the Nurse Leaders

A review of the report of the advisory group showed that there was high satisfaction and a sense of achievement in implementing systematic nursing. The change objectives had been achieved to a great extent although some areas such as documentation and accountability still needed careful attention and follow up. It was also encouraging that the comments of the nurse leaders were more positive in aiming at stabilising change. This suggested that the change which had occurred was expected to become part of the permanent system. One of the nurse leaders said that before the project she had wanted to change to patient allocation, but did not know how to go about it. The project gave her incentive and direction. Because N.C.H. is a developing hospital it more readily adapted to change and benefited much from the study. On the other hand C.M.C. is a more established hospital, and some of the senior members were resistant

to change. More motivation and follow-up was needed during the main study. Shortage of trained nurses made them feel the pressure of work at times. In spite of the pressures, additional objectives were achieved by C.M.C., for example changing class-room teaching from a medical model to a patient-centered approach and designing standard nursing care plans for surgical patients. There was no suggestion that patient care had suffered because of increased documentation. Although documentation needed some extra time, partly because of the language problem, it did not become an overly time consuming procedure as records were kept to a minimum. The general view was that patient care improved and in addition so did ward management. A high percentage of nurse leaders had reported that the nurse-patient interaction had greatly improved. The satisfaction of nurse leaders was related to successful innovation. This could be attributed to their involvement in planning, decision making, discussions and consultations. The nurse managers could present negative comments as well, without any reservations. They had freedom to discuss both positive and negative aspects by virtue of their professional status and also in the interest of the hospitals.

The steering group members were actively involved in the change process from the beginning of the project. As nurse educators and administrators they made valuable contributions to the process of change. The researcher felt that the steering group members would better perceive the changes that took place from the outset of the project. In the light of the change objectives formulated the researcher asked the steering group members to give individual written accounts of their perceptions of the outcome of change.

The written reports of two Nursing Superintendents, two Directors of Nursing Education, eight sister tutors and nine ward sisters are found in Appendix 12.

Comments of the Researcher on the Views of the Steering Group Members

Eight sister tutors and nine ward sisters expressed their views in writing. Views expressed by the tutors and ward sisters were overwhelmingly positive and suggested high levels of satisfaction. A very high percentage of the tutors and also some ward sisters said that they gained new nursing knowledge. Using the conceptual framework had been exciting and challenging. Five of the tutors and six of the ward sisters reported that nursing practice had improved and patient care had become individualised. The ward sisters reported that there had been better organisation of ward work. Both tutors and ward sisters reported that there was better correlation between theory and practice. Seven out of nine ward sisters said that the patients were highly satisfied with the nursing care given to them. A high percentage of tutors and ward sisters reported increased nurse-patient interaction and communication. This perhaps explains the patients' high satisfaction with their care. Some ward sisters also expressed satisfaction that there was better organisation of ward work. Tutors and ward sisters expressed the view that the record system had improved. Along with the documentation, increased accountability was also reported. Two of the tutors felt that their supervisory skills improved and they were better able to guide the students. The majority of them were greatly satisfied with clinical teaching. The other satisfaction expressed was that the hospitals

gained an enhanced reputation for nursing care. The mission hospitals already had a good reputation for nursing care. Nevertheless, systematic nursing made an impact on patients and their families. Four of the tutors reported shortage of staff. This was particularly applicable to one hospital. The nurse-patient ratio in C.M.C. during the exploratory study was 1:2. It was unfortunate that there was rapid turnover of staff. The nurses would have been more enthusiastic if the staffing had been adequate. The language problem was also noted, particularly in relation to general nursing students. However, the medium of instruction was English. Students' examinations were in English. Hence, systematic nursing made no new demand on students to learn the language. None of them expressed any dissatisfaction as a result of being involved in the study, in fact it was considered a challenge to their professional achievement.

Informal Talks with the Trained Nurses

The researcher had informal talks with 21 trained nurses during the maintenance phase. By this time the nurses were practising all four phases of systematic nursing. Nine trained nurses in N.C.H. and twelve in C.M.C. expressed their opinions about systematic nursing. The purpose of these informal talks was to find out whether nurses were aware of any changes that had occurred, and if so what they were; and whether they found the changes helpful in nursing practice and education.

The kind of questions asked were:

- What were the practicalities of systematic nursing?
- Was it difficult to cope with systematic nursing?
- How were problems which confronted them solved?
- Did the nurses gain any new knowledge? If so, was it useful in nursing practice?
- Were nurses able to integrate nursing theory and practice?
- Were they able to participate in clinical teaching?
- Were they able to carry on with bedside reports?
- Were they able to cope with the documentation?
- Were they able to spend more time with patients and their family members?
- Were nurses able to involve patients' families in their care?
- What were the patients' views of the new approach to nursing?
- What were the satisfactions and dissatisfactions of nurses regarding being involved in the study, and regarding the whole system of systematic nursing?

The researcher encouraged the trained nurses to express their views freely. The nurses talked both in English and the regional language and mostly these talks were in a mixed language which was half English and half Telugu. The notes were taken in English by the researcher. Each discussion lasted approximately 25-30 minutes. The informal talks took place in the nurses' station when nurses were less busy. An account of the informal talks is given in Appendix 13.

Comments of the Researcher on the Views of the Trained Nurses

Informal talks with the trained nurses confirmed that nurses were able to perceive the changes that had occurred. Changes reported by the trained nurses were patient allocation, systematic nursing, clinical teaching, bedside reports and introduction of new records. A high percentage, that is, more than 90% commented on greater job satisfaction. Most of them expressed the view that systematic nursing offered them new knowledge in nursing. A few of them mentioned the activities of living model and how it helped them to individualise patient care. All of them were able to individualise patient care to some extent. Satisfaction was reported regarding assessing, planning, implementing and evaluating care given to the patients, which was related to improvement in clinical practice. It was also reported that inclusion of family members in planning patient care contributed to the health education of the patient and his family. A high percentage of them reported that nurse-patient interaction and communication had also greatly improved. Reports by nurses that they were spending more time with their patients would support this. They also reported that their patients expressed greater satisfaction with the care received. Eleven trained nurses reported that they were participating in clinical teaching. They also reported that they found bedside reports very useful and said that these provided continuity in planning care. Both positive and negative views were expressed about documentation. Four trained nurses were not very happy with increased documentation. They felt it was time-consuming, whereas some of the other nurses considered it evidence of work done and thought that it provided continuity in

planning and carrying out patient care. Lack of supervision was reported by one nurse. This happened only once when a sister tutor went on holiday. Shortage of trained nurses was reported by five trained nurses. This related to one hospital where it was sometimes difficult to practise patient allocation. This did not suggest that patient allocation was discontinued completely at any time. No dissatisfaction was expressed as a result of being involved in the study. In fact, the nurses felt honoured to participate in the project.

Interviews with the General Nursing Students

Ten general nursing students in N.C.H. and nine in C.M.C. were interviewed in the nurses' station. Each of the interviews lasted approximately 30 minutes. The positive and negative comments are noted here:

Positive comments

- Systematic nursing brought a better correlation between theory and practice. Students were able to apply scientific knowledge from the use of biological and social sciences, while planning nursing care.
- Collecting data on patients' personal, medical, and social history and information on patients' religious beliefs, recreational activities and especially on activities of daily living had improved their nursing knowledge.

- Systematic nursing helped them to gain a holistic view of patients' problems and they learned to care for patients as individuals and total beings.
- This approach provided a lot of learning experience by encouraging participation in clinical teaching, especially presenting details of the patients under their care.
- Students were motivated to read more books and journals and made better use of library facilities.
- Communication improved between students and tutors, students and ward sisters and students and students.
- Sometimes students consulted doctors to find out more about patients' conditions and medical treatment in order to plan nursing care.
- Documentation had been another aspect of the learning experience.
- Support groups had been a help in consulting and talking about systematic nursing.
- Systematic nursing gave greater satisfaction to nurses and also to patients.

Negative comments

- Initially some students feared that their class-room learning would be affected by participating in the project, but soon they learned that there was better correlation and integration between theory and practice. This created more interest and students were happy and ready to participate in the project.

- Shortage of trained nurses, particularly in one hospital, demanded more work from students. On the other hand, students going to the other hospitals for placement created more work for staff.

Most of the general nursing students expressed the view that systematic nursing had facilitated better correlation between theory and practice. They also reported that they were provided with more learning experience. Satisfaction was expressed as regards gaining new knowledge. This meant gaining holistic views of patients' problems, planning and giving individualised care to patients. Participation in clinical teaching seemed to motivate the students and challenged their learning. A high percentage of them reported increased communication between various levels of nurses, and nurses and patients. Students expressed greater satisfaction in caring for their patients. Participation in the project was described as a learning and rewarding experience. Shortage of trained nurses in one hospital imposed extra work on students at times.

Interviews with the Patients

A total of 40 patients were interviewed in both hospitals, 16 in N.C.H. and 24 in C.M.C. Of this number, 24 were female and 16 were male, medical and surgical patients. The purpose of these interviews was to find out patients' satisfaction and dissatisfaction with systematic nursing being practised in the wards. The interviews were in the regional language and each interview took approximately 20 minutes. The questions were focussed on the following areas:

- whether patients were satisfied with the ward environment
- whether patients were satisfied with nurses taking their history or did they feel that nurses were intruding into their personal matters
- were they satisfied or dissatisfied with nurses involving them in planning their own care
- what was their opinion about nurse-patient interaction and communication
- whether or not patients felt that their care was being individualised
- did systematic nursing make any changes in their day, for example, waking time, sleeping time, visiting time
- the thing that they liked most about systematic nursing
- the thing that they disliked most about systematic nursing

Positive comments

The ward environment was considered to be good. The wards were kept neat and tidy. The nurses mostly appeared to be pleasant although one or two nurses appeared to be a little rude. Most nurses made the patients cheerful and happy. They were kind to the patients and their relatives. Some ward sisters appeared to be very busy, and did not have as much time as other nurses, yet they made both morning and evening rounds and communicated with each patient and found out their problems. They also attended doctors' rounds.

Of the 40 patients interviewed, 35 expressed their satisfaction with care given to them. The remaining 5 patients were not actually

dissatisfied with the care, but wished that there were more nurses. They felt that the work load was a little more than it should be.

None of the patients expressed any dissatisfaction with nurses taking their history. They felt that nurses were more interested in them. They thought that it was good that nurses were getting to know their problems.

Half of the patients interviewed had been admitted to these hospitals before the new system was introduced. They said that there was a lot of improvement in nursing and patients were getting better attention now. Patients felt that they were better informed about their health status by being involved in planning their care. Patients and their family members expressed their satisfaction.

One patient said that he had stayed in hospital for six weeks following a nephrectomy operation. His wife stayed with him throughout that period and had been involved in his care from the beginning. One student nurse and a trained nurse took care of him for the first four weeks. An assessment was made and nurses attended to all his physical needs until he was able to move about. His wife helped with feeding and toilet services if she was there, otherwise these aspects of care were attended to by the nurses. There was minimum disturbance with his sleep, especially the first few days after the operation. Nurses were sympathetic to him and to his family. Although he was a Hindu he received spiritual help and support. He said that he received excellent care and nurses spent a lot of time with him and his wife and prepared them for discharge. He also indicated that health education was given.

Another patient with a fracture of the tibia and fibula expressed similar views. He said he was quite satisfied with the way nurses talked with him and his wife and planned care with them. Periodic assessment was made on mobility after complete bedrest for the first few weeks. Other problems were also identified and care was planned. His wife too was satisfied with all aspects of care.

A patient who had had a cataract operation expressed great satisfaction with the care he received. He had a lot of nice things to relate about the nurses and nursing care. He said that nowhere else had he received such excellent care. The nurses explained about his movements, diet, cleanliness and emotions. Apparently this patient used to talk a lot about 'Indian Philosophy' and attracted other patients around his bed. He tried to do this the day after the operation. This was causing strain on his affected eye, so the nurse advised him to limit his conversation and explained the reasons for it, in relation to the cataract operation.

Another patient with pleurisy was hospitalised for 10 weeks. He was a hospital employee and was admitted to the hospital before systematic nursing had been started. He expressed a great deal of satisfaction with the new approach in nursing. He was able to notice the change between the old system and the new system. He was quite happy with the improved communication and interaction, bedside reports and individualised care. In addition to his physical care he said he received psychological and spiritual support.

Female patients did not express any dissatisfaction. Some patients who had undergone hysterectomy operations were interviewed.

Other medical patients said that they were included in planning their care and nurses gave them individualised care.

Patients expressed greater satisfaction with patient allocation compared to task allocation. With systematic nursing there was less disturbance by nurses now. They said that previously one nurse after another used to go to do various jobs, one taking the temperature and the other checking blood pressure and so on. Now one or two nurses attended to them, care was better planned and there was less disturbance. Patients said that there was better nurse-patient interaction, communication and understanding. Nurses were approachable and helpful, sympathetic and understanding and took an interest in them.

The thing that patients liked most was nurses listening to their problems and attempting to understand them. They did not like nurses who said they did not have time to listen to them.

Comments of the Researcher on the Views of the Patients

Of the 40 patients interviewed, none reported dissatisfaction. In fact a very high percentage of the patients reported that they received very good nursing care. They also expressed satisfaction with the improved nurse-patient relationship and communication. A number of them were able to appreciate the difference between task allocation and patient allocation. Patients also expressed satisfaction with being involved in planning and participating in their care. Patients' relatives also reported greater satisfaction with the care given to patients. Most of the patients felt that their care was well organised and individualised. No dissatisfaction was

reported. Patients found the nurses sympathetic, understanding, supportive and caring.

It could be argued that the patients were inclined to make more positive comments than negative. Although a high percentage of patients in these hospitals were illiterate and ignorant about health matters, the role of the nurse had been perceived as a caring one. Patients and their families were being educated on health matters. There had been times when patients demanded an explanation as to why care had been neglected and also reported this to the doctors and ward sisters. Hence the positive views expressed by the patients could not be totally ignored.

Observations of the Researcher

Besides the interviews the researcher made a number of observations on interesting incidents such as nurse-patient interactions, communication, participation of the patient in his care, inclusion of patients' families in their care, and hand over procedures. The researcher also attended several clinical teaching sessions and bedside reports in each hospital. The purpose of these observations was to assess the ability of nurses to carry out bedside reports and case presentations effectively and then to offer help when it was required. An anecdotal record was kept.

It was interesting to note that most of the patients and their families made a special effort to see and thank their nurses before they left the hospital. They especially looked for students who took care of them. In the regional language patients referred to a student as 'chinna akka' or 'small sister'; similarly to a trained

nurse as 'pedda akka' or 'big sister'. The title 'sister' was used for the sister tutors. The patient or the relative expressed gratitude to the nurses who took care of him or her and said that he or she 'will go and come', an expression similar to good-bye, but literally meaning that the patient would come back. An Indian would never say that he was going because this would mean that he would die and never return again according to local superstition.

Documentation had been observed for the purpose of assessing:

- the ability of nurses to make an assessment
- their ability to incorporate the conceptual framework within the assessment and identify patients' physiological, psychological, social and spiritual problems
- their ability to formulate nursing objectives and plan nursing care
- whether or not planned care was given to patients
- whether or not nurses were able to document the outcome of nursing care given to their patients in the light of objectives formulated
- whether or not nurses were able to write nurses' notes.

The observations of the documentation are not reported specifically but are mentioned where appropriate elsewhere in the thesis.

Feedback to the Researcher

Three months after completion of the main study in April, 1986, the researcher corresponded with the nurse managers, enquiring whether they were able to continue with systematic nursing, bedside reports and case presentations. The purposes of collecting this data were first to find out whether the nurses were able to cope with the changes introduced and secondly, to find out whether systematic

nursing had become part of the nursing system. Positive reports were received from the two Nursing Superintendents. These are quoted here:

Nursing Superintendent 1

> "We were continuing all the things that you taught us including bedside reports and presentation of case studies, one or two each week. We have had to have more assessment forms printed. So that indicates we are going on!"

Another letter was received from this Nursing Superintendent in the first week of May in which she stated:

> "Bedside reports have caught on now and we have had three case presentations this week. I am just putting an order in for 2,000 more nursing care plans too. So we really are continuing!"

Nursing Superintendent 2

> "Yes, we are continuing with systematic nursing. I am sending the copies of the standard nursing care plans to N.C.H.".

In a second letter which was received in July 1986, five months after completion of the main study, the Nursing Superintendent stated that patient allocation, nursing assessment, and nursing care plans were continuing. Case presentations and bedside reports were regularised and continued. Standard pre- and post- operative nursing care plans were found to be useful. In a concluding remark she stated:

> "I assure that systematic nursing will continue in this hospital."

Besides this, the researcher had also sent a simple questionnaire to all the ward sisters participating in the study (see Appendix 14). The questions were mainly related to systematic nursing, that is,

writing nursing assessment and nursing care plans, giving planned care and evaluating the outcome of care given. The other questions were whether they were participating in clinical teaching and giving bedside reports. Responses received from the ward sisters in both hospitals were overwhelmingly positive. They said that they were continuing with systematic nursing, bedside reports and clinical teaching.

CHAPTER 8

SUMMARY, CONCLUSIONS, DISCUSSION AND IMPLICATIONS FOR THE FUTURE

SUMMARY

This study has been a description of the implementation of systematic nursing in medical and surgical wards of two hospitals in India using an action research approach. Nursing practice in India is traditionally ritualistic and task-oriented. The philosophy underlying this study was that the individual is a person, a unified whole and has physiological, psychological, social and spiritual aspects to his make-up. It was believed that by a systematic problem-solving approach the individual's problems could be identified and planned nursing care could be given, taking the patient's totality into consideration. Rogers' (1970) theory of life process supports this view. This problem-solving approach is a scientific approach to nursing and it was hoped that this would shift the emphasis of nursing from traditional task-oriented nursing to a more systematic and scientific approach to nursing.

The theoretical framework for this study was derived from systems theory, change theory and selected nursing theories. Systems theory provided the framework for understanding the health care system in the hospitals and the systems within the systems (subsystems), their interrelation and interdependence. Change theory (Lippitt, 1973) embodied action research strategies and pointed the way to the planned change process. Rogers' (1970) nursing theory provided a holistic view to conceptualise the individual as a total being and the multidimensional problems of the individual. Nursing theories indicated the way to understand the individual's problems and to plan care accordingly and this provided a framework for nursing practice.

The two methods used in this study were action research and descriptive study. The strategy chosen was aimed at bridging the gap between nursing education and nursing practice. Thus action research strategies were used to solve problems, to make decisions, to develop a new programme and to evaluate the programme. To chronicle the entire action research project and to uncover the new facts about systematic nursing within the hospitals under study, a descriptive approach was appropriate. The method of the action research project was described in five phases. These were: 1) an initial survey of the environment; 2) an assessment of the change environment; 3) preparation for the study and pre-testing; 4) setting the change objectives - change process and 5) stabilising change.

Methods of data collection used were participant observation, unstructured interviews, informal talks and diaries. Two data collecting instruments were developed: 1) Nursing Assessment Forms and 2) Nursing Care Plans.

Altogether nine months were spent on implementing the change. Preparation for the study and pre-testing was carried out between December 1984 and March 1985. The implementation of systematic nursing took place between August 1985 and January 1986.

The first part of the study was concerned with the preparation of nurses for implementing systematic nursing. Eighteen hours of teaching was given to nurse managers, tutors and ward sisters in each hospital. This included practical sessions, group work, role playing and simulation. Introductory lectures were given to trained nurses and students. The nursing assessment forms were tried with ward sisters, trained nurses and general nursing students in both hospitals. The researcher wrote nursing care plans for 16 medical

and surgical patients in these two hospitals. Pre-testing of these forms proved that they were effective and usable.

Change areas were identified and a decision was taken to implement systematic nursing, under the planned change model. The objective of the main study was to change nursing practice from a traditional, task-oriented approach to a more scientific and problem-solving approach, namely systematic nursing. To meet this objective, patient allocation was introduced in the study hospitals.

Before the commencement of the main study, lectures were given to trained nurses and students. Systematic Nursing was introduced in four phases over a period of 14 weeks in each hospital. The main emphasis in Phase One was on nursing assessment and identifying nursing problems. A structured Nursing Assesssment Form, and activities of daily living (Appendix 2a and b) were used for this purpose. Nurses were able to identify patients' physiological, psychological, social and spiritual problems without much difficulty.

Phase Two dealt with writing individualised nursing care plans. The Nursing Care Plan Form (Appendix 3) was used for this purpose. Nursing care plans contained a list of patients' problems, nursing objectives for each problem and a list of nursing interventions to solve the problems. Patients and their families were involved in planning patients' care. Planned care was implemented during Phase Three. The participating nurses gave planned, individualised care to their patients. The outcome of nursing care given was evaluated during Phase Four. The actual patient outcome was compared with the expected outcome. One phase of systematic nursing led to the next and it was an on-going process.

One male medical and surgical and one female medical and surgical ward in N.C.H. and one male medical and surgical and two female medical and surgical wards in C.M.C., altogether five wards were involved in the study. Patients and nurses were involved in the study and the entire implementation process.

The following limitations were taken into account in interpreting the findings.

- the nature and size of the sample of patients
- the nature and size of the sample of nurses
- the problem of obtaining objective data for evaluation of the project
- the length of time available for the study
- the possibility of researcher bias leading to a possible 'Hawthorne effect'.

Having completed the main study, it could be said that the objectives of this study have been broadly accomplished. The teaching programme conducted prepared the nurses adequately to implement systematic nursing. Patient allocation was introduced and stabilised. With the implementation of systematic nursing, the emphasis in nursing practice was shifted from the traditional task-oriented model to a problem-oriented model, which is a systematic and scientific approach.

It was evident from the interviews, written reports and discussion with various groups of nurses and also from the observations of the researcher, that the nurses gained a holistic view of the patients' problems. A number of nurses reported that they acquired new knowledge which enabled them to plan and give individualised patient care. They were more positive in their assertions that the patients received the best attention and nursing care, and that care was tailored to their individual needs and problems. Better correla-

tion between theory and practice was reported. This in turn provided better learning opportunities; and the application of conceptual models gave the nurses more insight into patients' problems, planning care, implementing the planned care and evaluating the outcome of care given to the patients. Doctors expressed similar views as to the achievements of the project.

Patients and their families were included in planning their care and also participated in it. Patients became more aware of their health needs by participating in planning their care. Patients and their families were better educated on health matters which is one of the objectives of the health care system in India. Patients expressed greater satisfaction about the care they received. They also expressed the view that their care had been individualised.

The nurse-patient interaction and communication had greatly improved and nurses were able to spend more time with their patients. Clinical teaching and bedside reports were established. Records were reviewed and an adequate record system was developed. In addition to the documentation, the accountability of nurses in respect of patient care had also increased. Doctors, nurses and patients reported that the quality of patient care had improved.

Nurses reported greater job satisfaction. They expressed the view that they were more involved with the care of patients than in concentrating on tasks. They were able to integrate theory and practice and this gave them a sense of satisfaction. The results of the study suggested that systematic nursing had obtained a considerable amount of stability in the wards involved in the study. Other changes introduced were also stabilised. It was also reported that

the ward management had improved and there was better organisation of ward work and better utilisation of nurses.

Shortage of trained nurses and a heavy work load discouraged some nurses from active participation in C.M.C. But there were fewer patients during the harvest season and festivals and also when the surgeon was absent for some time, so the shortage of staff was compensated for by the decreased number of patients.

The researcher worked in co-operation with the nurse managers, tutors and ward sisters. Their roles were interdependent. This helped the researcher to understand them better and mobilise their support efficiently. There had been sharing of administrative and professional problems. Some of the tutors wanted the researcher to stay longer.

CONCLUSIONS

The purpose of this study was to bring about a change in nursing practice, that is, to change nursing practice from a traditional task-oriented model to a more scientific and problem-solving approach, namely, systematic nursing.

The following conclusions can be drawn from the study. These are stated in relation to the study objectives.

To Describe the Existing System of Nursing Practice in the Hospitals Selected for the Study

The findings of the exploratory study undertaken, involving discussions and interviews, confirmed that the nursing practice in the study hospitals was neither essentially individualised nor systematic. This was to be expected as systematic nursing had not been established in Indian hospitals. It was also evident that

differences existed between the two study hospitals; for example, nursing practice in N.C.H. was highly task-oriented whereas team nursing was practised in C.M.C.

To Describe the Extent to which Patient Allocation is Practised

From the participant observation and interviews conducted, there was no evidence of patient allocation being practised in N.C.H., although an attempt had been made to introduce it some years previously. Although the concept of patient allocation was understood by the nurse managers, tutors and ward sisters in C.M.C., their attempt to stabilise patient allocation had been unsuccessful. Hence it was evident that none of the study hospitals practised patient allocation.

To Describe the Process of Change in the Implementation of Systematic Nursing

The study found a relationship between the planned change process and introducing systematic nursing. This finding contributes to recent nursing thinking which highlights the importance of a carefully planned systematic nursing approach if individualised nursing is to be achieved. The particular contribution of the present research is that it points to the validity of change theory in relation to the implementation of systematic nursing. The study suggests that the success of change depends on the degree to which the change is planned and systematically introduced.

To Describe the Educational and Administrative Process in Introducing Systematic Nursing

The finding of the study also emphasised the necessity for an educational programme and demonstrated the new nursing knowledge

gained by the participating nurses. It was apparent that educational preparation was necessary for successful implementation, management and stabilisation of change.

The project was seen to have brought about a meaningful change in nursing practice. This was demonstrated when the hospital administrative committees met. Although the researcher could not guarantee a positive outcome, the innovation was encouraged and supported by the management. This suggested that the management viewed the project as beneficial to the improvement of nursing standards. There was a significant contribution from nurse managers in supporting and co-ordinating the change process. This suggested that the managerial support was essential in implementing the change. It was also evident that the contribution of the tutors and the ward sisters as steering group members was of great importance in managing the change activities of introducing systematic nursing. Support group meetings for the participating nurses strengthened the consultative and support structures and contributed to the implementation of change. Involvement of all groups was widely valued.

To Describe the Outcome of Change

There were apparent differences in the perceptions and satisfactions of nurses and patients concerning systematic nursing before and after the study. Implementation of systematic nursing apparently resulted in more satisfaction among patients with the care they received and greater job satisfaction among the nurses who participated in the study.

Although change has been stabilised in the study hospitals, two concerns emerged: firstly, there was a shortage of trained nurses in

C.M.C. and secondly, there was improper documentation. Continued support from the tutors and ward sisters seemed essential for continued success.

Finally, it could be said that the study objectives have been broadly accomplished and the change from task-oriented to systematic nursing has been successfully introduced.

DISCUSSION

The important feature of this study lies in its innovation and the extent to which systematic nursing was introduced successfully in selected hospitals in India. This discussion therefore centres on action research strategies and on the roles played by the managers, tutors and the participating nurses who were actively involved in the project and made the change occur. Cope and Cox (1980) in their study recommended involvement of the management in the change process. They state:

> "Before the success of an intervention can be predicted, we need also to know that certain features in the context or environment of the organization are suitable. In other words it is essential to know before we set sail that the winds will very probably be fair.... They include such things as getting the support of top management, building relationships of trust with the people concerned." (p. 380)

Negotiating Change with the Management

Originally N.C.H. was almost a closed system. There was some amount of openness in C.M.C. Negotiations were held and plans were communicated to the management. Involvement of the management encouraged openness and facilitated the change process as management was also made responsible for change.

As a result of the management being kept informed about the change plans and process, there was co-operation and support throughout the change process.

Education for Change

In order to prepare nurses adequately to implement systematic nursing a teaching programme was introduced. Eighteen hours of formal classroom teaching were given. Practical sessions were held. Individual and informal teaching was also given to those who needed it. Action research provided a unique experience for the participating nurses to learn and change. Changes were not haphazard but planned. Imparting new knowledge resulted in implementing new methods in nursing. The new methods introduced were patient allocation, systematic nursing, bedside reports, documentation and clinical teaching.

In addition to the formal teaching the nurse managers, tutors and ward sisters received special training to monitor and stabilise change. They played the role of internal change agents. It is important to note that the internal change agents were not social scientists introduced in the hospitals for this purpose. They were part of the hospital system and they helped to bring about changes.

Role of the Researcher

The researcher played an important role in implementing systematic nursing. She negotiated the change and conducted the teaching programme. She prepared the internal change agents. The researcher as an external change agent adopted the helping roles suggested by Lippitt (1973). She too was committed to change and offered maximum

help and assistance throughout the change process. The participating nurses and the researcher together made every effort to stabilise change and prevent any discontinuance of it. However, her role was limited to advising, guiding and assisting. Attainment of the objectives depended on the internal change agents and participating nurses.

Roles of the Nurses Participating in the Change Process

The nurse managers

Initially differences existed in the nursing administrative structure in the two study hospitals. N.C.H. followed an autocratic model which practised direct control, communication and decision making. There was less scope for delegation of responsibilities and decentralisation of authority. Although some amount of delegation and decentralisation was exercised in C.M.C. the decision making was reserved for the nursing superintendent. In both cases the project brought about considerable changes in the nursing administration by encouraging openness, communication, interpersonal and inter-professional relationships, delegation of responsibilities and decision making. Nurses were able to approach the managers with less reluctance.

In N.C.H. staffing patterns had to be altered. These involved changes in nurses' time-schedules, and patient identification and printing of new records. Similarly, in C.M.C. changes were made in nurses' time-schedules, reprinting of records, grouping of patients, and also the appointment of a few more nurses. Although these changes affected the existing administrative structure, the nurse

managers willingly adapted to these changes, understanding their implication for the study.

The ward sisters

Differences also existed among the ward sisters in both hospitals in their preparation and individual ability to manage the wards. They had opportunities to exchange ideas and learn from each other. The project provided opportunities to improve ward management and patient care. New methods were adapted, which provided learning experiences to the ward sisters. The ward sister is a key person in the management of the ward. The role of the ward sister is of paramount importance in this process of change and in enabling change to become part of the ward routine.

The nurse-educators

Systematic nursing also affected the educators of nurses. Nursing practice and nursing education are both interrelated and interdependent. They can not be separated, neither is it desirable to do so. However, the central concern of the project was the patient himself. Nursing education and nursing practice together should focus and direct activities towards the patient. The directors of nursing education contributed a great deal towards systematic nursing. They worked in co-operation with the nursing superintendents. They also accommodated certain changes like postponing students' affiliation to other hospitals, sparing tutors to spend more time in the wards so that they could help the participating nurses.

The thrust of change stemmed from the extended role of the tutor as a clinical teacher and supervisor. They offered maximum help and ensured that changes introduced were carried on. The project generated enthusiasm in tutors. In C.M.C. the tutors were able to shift the class-room teaching to patient-centered approaches. Together, the tutors and the ward sisters established clinical teaching. The project created interest and focused attention on new priorities as mentioned above.

The trained nurses and general nursing students

In implementing and stabilising change the involvement, participation and contribution of the trained nurses and students was of great value. This made tutors feel more responsible and committed to change. A conducive environment was created for students' learning. Students in both hospitals were helped with the use of the activities of living model as a framework to write their case studies. The trained nurses and students were observed spending more time with their patients. They actively participated in giving bedside reports and clinical teaching. As a result, the entire clinical atmosphere was enlivened. The nurses showed interest and aptitude, and willingness to learn and to adapt to the new system and methods in nursing.

Documentation

Without documentation systematic nursing cannot be implemented. Nursing assessment forms and nursing care plans were introduced. Nurses' notes were written on existing nurses' records. Two important points should be noted here: Firstly, documentation definitely

took more time. In task-oriented nursing very little documentation was done and reporting was mainly verbal. Changing nursing practice to systematic nursing increased documentation. Although nurses were prepared for this change, some senior nurses in both hospitals were unhappy with increased documentation, especially in C.M.C., where there had been continuous complaints from a ward sister. On the other hand some nurses were able to appreciate it as it is evidence of work done and also helpful in the event of legal problems. Secondly, although documentation has been introduced, it still needs the supervisors' attention as some of the participating nurses found it difficult to write meaningful, precise statements in English. Nursing records provide data for measurement of outcome and highlight factors which might affect outcomes. Documentation still needs to be developed.

The fact that some of the nursing care plans were inadequate was because systematic nursing was an entirely new concept. Committing information to paper in a language which is not their own is not an easy task. The essence of thought was lost in expressing it in a different language. But this need not limit or inhibit implementation of new methods in nursing. Since English is the official language all the records are kept in English in India.

Interviews with the patients were conducted in Telugu which is the language of the state. Some of the nurses responses were in a mixture of English and Telugu languages. The translation of ideas expressed in one language into another is not without difficulty. In some places the language conditioned the expression of certain ideas, on the other hand it also influenced the information and the articulation of ideas. Also, the researcher faced some difficulty in

expressing everything in a language that sometimes did not contain the exact words to translate the original ideas of the nurses and patients who participated in the study.

Group Strategy for Change

The general nature of action research is to involve in the change process all those who are concerned with the change. In implementing systematic nursing, the work was organised in such a way that the nurses from top to bottom were involved and made responsible for the functions they had to fulfil. Fretwell (1984) reported shared responsibility as a useful strategy for change. Fretwell (1984) states:

> "Top-down change is usually decreed unilaterally by memorandum.... Although there may be rapid, visible changes, long term results are questionable where the commitment of people is needed to make changes work which clearly is the case in nursing. It runs the risk of regression or reversal and there may be dysfunctional effects.
>
> In bottom-up change, although managers may provide the budget, they delegate responsibility and content to lower levels for training.... Enthusiasm for innovation may approach a 'religious zeal' at lower levels but the 'take' in the rest of the organisation is low; because top managers are not committed, do not change their own behaviour or make organizational changes to support the innovations they have authorised." (p.129)

A group strategy was found to be useful in implementing systematic nursing. The nurse administrators, the nurse educators and the practising nurses were all jointly involved in the project.

The Nursing Superintendents and the Directors of Nursing Education of the study hospitals formed the advisory group. The tutors and the ward sisters together with the Nursing Superintendents and the Directors of Nursing Education worked as steering group members.

This group strategy brought the management, the tutors and the ward sisters together to work towards the objectives. Change activities were planned and substantial changes were achieved in a remarkably short period of six months. The formation of support groups was also useful in meeting the learning needs of individuals. Their ability to participate in and contribute to the change process was the evidence that change had attained stability.

Formal and informal channels of communication were developed through the hospital administrative committees, advisory group meetings, steering group meetings, support groups and ward meetings. These created opportunities for nurses to negotiate their roles within their assignment and enhanced inter-personal and inter-professional relationships and communication among all the members.

To these two hospitals, to their nurses and other workers, research had a very real significance. From the above discussion, one can understand that change was intended, planned and implemented and that it had not occurred because of some kind of 'Hawthorne effect'. (According to Abdellah and Levine (1965) 'Hawthorne effect' is a term used to describe the positive psychological response of people who are involved in the research setting.) It is of crucial importance to continue with the changes implemented. The changes that were introduced thus far were stabilised to some degree. This suggested that the internal change agents played their roles effectively.

Evaluation of the Project

The main objective of this study was to bring about a change in nursing practice, that is, to change the nursing practice from a

traditional task-oriented model to a more scientific and problem-solving approach which is systematic nursing.

The change brought about through this project was seen as meaningful. This was demonstrated when the hospital administrative committees met. Although the researcher could not guarantee a positive outcome, the innovation was encouraged and supported by the management, as they considered that the project would improve nursing standards.

All the nurses who participated in the project from the Nursing Superintendent down to the student, played a role in interpreting the results. They were expected to realise the change objectives and their responsibility in achieving those objectives. Monitoring of progress took place in advisory group meetings, bi-weekly steering group meetings and follow up meetings. Progress and positive experiences were brought out and problems were discussed.

The researcher was able to obtain first hand information and experience through participant observation, unstructured interviews, informal talks and patients' records. Interesting data were collected. Patients and their families, doctors and some of the paramedical workers also provided valuable information.

IMPLICATIONS FOR THE FUTURE

The project was set up to help shift the emphasis of nursing practice from traditional task-oriented nursing which has existed for over half a century in India and continues even in the present time. Data collection tools were developed, along with action research strategies, to change nursing practice from task-oriented nursing to systematic nursing.

Results support the view that education is necessary to bring about a desired change. Nurses at all levels had to be prepared adequately before the system could be changed. The researcher, with the support and commitment of the nurse managers, tutors, ward sisters and participating nurses, was able to implement and sustain changes. Changes were beneficial to the hospitals as health care systems and to the other systems in the health care system as well. In particular, the nursing administration, education and practice greatly benefited from the project. Once the creative environment was established, the opportunities for development were impressive and the nurses were able to cope with the project even when they were faced with problems such as shortage of staff and resistance to change by a few nurses.

In this study, problems associated with staffing caused some anxiety, particularly in C.M.C. during the main study. This problem did not exist during the period of preparation for the study. This problem created some amount of difficulty with heavy work loads and documentation. Adequate nurse-patient ratios had created interest and enthusiasm among participating nurses in N.C.H. The study has also suggested that improvements can be made through participant approaches and education. Since the study mainly focused on innovation, analysis is confined to qualitative data.

Implications For Research

Nursing research in India is still in an embryonic stage and there is no provision made for nurses to proceed with research studies. Many nurses in India have never heard of research studies in nursing. This project brought an awareness of nursing research to

nurse educators and administrators in the Board of Nursing Education, South India, when the researcher had an opportunity to discuss her research project with them. The Trained Nurses Association of India and the Christian Medical Association of India are aware of the on-going research project.

This project is the realisation of the researcher's dream over a decade, ever since she first learned about patient-centered approaches in nursing. The emergence of the concept of comprehensive health care in India, the extended role of the nurse to meet this objective and the changes in nursing education in India, all came at a strategic time for the researcher to pursue this project. In the light of the recommendations made by the National Research Conference, there is an urgent need to foster a research attitude among nurses. The National Nursing Boards and Councils must provide opportunities for nurses to pursue research studies.

The present study has uncovered a wealth of hidden talent in nursing. There are nurses who have abilities and the aptitude to participate in research. It makes sense to develop it. It will be of great value to start clinical research in hospitals.

As Grypdonck (1980) states:

> "there is a constant interaction between practice and investigation in which the plan of the investigation is influenced by practice and practice by the plan of the investigation. Practitioners participate in the conception and elaboration of the plan of investigation". (p. 522)

Quantitative studies, for example those concerned with issues such as patient outcomes, nurses' satisfaction, patient satisfaction, nurse-patient interactions and improvements of patients' health

status would be useful and could be considered. It is also worth considering outcome studies in the two study hospitals to find out to what extent systematic nursing has been stabilised.

The value of action research should be explored as a way of encouraging critical thinking among practising nurses, and providing a vital link between practice, research and theory building, and stimulating innovation in nursing.

Implications For Education

This study made it explicit that the nurses should have a good grounding in biological and social sciences in order to assess patients' problems, plan and give care accordingly, and finally evaluate the outcome of care and modify plans. It is essential for nurses to possess scientific knowledge, without which implementing systematic nursing will not be effective. The Indian Nursing Council syllabi for general nursing included social sciences in recent years. Although nurses in India are taught biological and social sciences, the application of this knowledge in clinical situations is not being stressed. Introducing systematic nursing is a way of integrating theory and practice.

No attempt has been made to integrate nursing knowledge within a model for nursing. It is worth considering a model for nursing practice. This will give completeness to the curriculum. During this study, the nurse educators especially appreciated the value of using a model in nursing practice and the implication of introducing it in the nurses' training programme. It is advisable that each School of Nursing's curriculum should be re-organised, integrating

biological and social sciences, thus making use of a model in planning individualised patient care.

The Indian Nursing Council and the Board of Nursing Education must keep abreast of the new developments in nursing. The medical model of teaching in Schools and Colleges of Nursing should be discouraged. It is recommended that they should include a systematic approach to nursing care in the nursing syllabi.

Nursing education in India is not research oriented. Rather than viewing this as a limitation, the researcher took it as an opportunity to introduce nurses to the research process. This proved to be a worthwhile experience. It is hoped that nursing education in India will soon be research-oriented.

Implications For Management

In general, nursing administration in India follows a hierarchical structure of management. As mentioned earlier when N.C.H. accepted delegation of responsibilities and decision making, the channels of communication improved and more democratic relationships were established and changes were brought about without much difficulty. Similar changes also happened in C.M.C.

To enhance patient care it is necessary for management to alter administrative structures that affect inter-personal and inter-professional relationships and communication. A rigid and autocratic administrator cannot influence the practitioners. Some amount of flexibility is necessary to reach, initiate, appreciate and encourage practitioners' views in order to bring about changes. Democratic relationships should be fostered for better co-ordination and collaboration.

There is evidence that management at ward level has improved. It is possible to improve management at ward level for better patient care and manpower planning according to the care that patients need. Systematic nursing has implications for effective management which involve decision-making processes, and these in turn influence patient care, and the whole effective management of the ward.

Nursing records provide data for measurement of outcome and highlight factors which might affect outcomes. Nursing audit studies, for example by Phaneuf (1976), could be useful to answer the question of what is the quality of care provided. Systematic nursing cannot be restricted only to nursing practice but has wider implications for effective management.

Implications For Nursing Practice

Systematic nursing focuses on systematic planned nursing interventions. Grypdonck (1980) considers systematic nursing intervention as a manifestation of scientific practice. A systematic, problem-solving approach contributes to objective and scientific nursing as opposed to the traditional, task-oriented and intuitive practice of nursing.

In the emergence of this era of scientific nursing, nursing is considered as a caring science by Watson (1979). Rogers (1970) refers to nursing as the 'science of nursing' and 'humanistic science'. It is important to consider nursing as a science-based profession rather than a traditional, intuitive, task-oriented ritual practice. Perhaps the term 'nursing sciences' could be adopted for nursing courses. Instead of referring to a certificate or a diploma in nursing, it could be referred to as a certificate or a diploma in

nursing sciences. It could be argued that the concern of nursing is the individual or the person himself, with his physiological, psychological, social and spiritual problems, which in some way or another fall into the classification of biological and social sciences, and that nursing education includes these sciences, and therefore why cannot nursing be referred to as a nursing science? This would increase the professional status of nursing and there will be wider acceptance of nursing by the society. In a country like India, where nursing is still not considered as a respectable profession and many young women are deterred from coming into nursing, perhaps the change of terminology will lead to a better acceptance of nursing.

The main focus of nursing councils and boards is on nursing education. Change in nursing practice is almost ignored. Systematic nursing bridges the gap between nursing education and nursing practice. The nursing councils and boards must pay special attention to nursing practice to develop it along with nursing education.

The nurse managers, tutors and ward sisters could aim at improving nursing records as these are tools to develop and improve nursing standards. They should also take individual learning needs into consideration, give help and guidance as and when required.

Systematic nursing also places emphasis on the accountability for care given to patients and how nurses are utilised. The practising nurses also have an important role in developing nursing knowledge through observations and questioning in relation to nursing care plans and interventions.

CONCLUDING STATEMENT

Nursing practice was task-oriented in the hospitals selected for this study, although there was some variation between the two hospitals. By the implementation of systematic nursing, nursing practice was changed from the traditional task-oriented model to a person-centered and problem-solving approach in five medical and surgical wards of two selected hospitals in India.

New nursing knowledge was gained by nurses who attended and participated in the teaching programme on systematic nursing. The nurse managers, tutors and ward sisters had special training as internal change agents to manage and stabilise change. Substantial changes have occurred and the change objectives were broadly accomplished.

Some difficulties were experienced in the course of the study. These included organisational problems such as shortage of trained nurses, language problems experienced by some nurses, and resistance to change by a few staff members. From the point of view of the researcher travelling abroad twice and travelling between the hospitals every other week was a difficult task. Whether changes introduced would be stabilised was another uncertainty, although every indication was there that these would continue. Nevertheless, it was a worthwhile experience.

It was encouraging to find increased interest in systematic nursing and individualised patient care among nurse managers, tutors, ward sisters, trained nurses and students. They also demonstrated interest in using nursing models in nursing practice. Participation by the patient and his family in the patient's care was encouraged throughout this study. There was an increased interest towards this

new approach and it is quite likely to be followed. There are obvious positive signs that the nurses will continue with it.

Despite the limitations of the study, the study has contributed to the improvement in nursing education and nursing practice and perhaps is a stepping stone in nursing research in India. This chronicle of change in nursing practice is perhaps the first project of this nature ever conducted in the history of nursing in India. The study has created interest in research in tutors and ward sisters and replication of the study could prove worthwhile in introducing the systematic nursing approach in other hospitals, both in India and in other countries.

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APPENDIX 1a

THE INDIAN NURSING COUNCIL SYLLABI

FOR GENERAL NURSING COURSE

THE INDIAN NURSING COUNCIL SYLLABI

FOR GENERAL NURSING COURSE

PURPOSE OF COURSE

To prepare nurses to practise in first level position in nursing in the hospital and in the community by means of an educational programme which is geared to the health needs of the country and of the individual in society; which will serve as a basis for advanced study and specialization in nursing; and which will assist nurses in their personal and professional development so that they may make their maximum contribution to society as individuals, citizens and nurses.

GENERAL OBJECTIVES OF COURSE

To help the student:

1. To acquire a knowledge and understanding of the basic principles underlying the techniques and methods used in nursing.
2. To acquire the knowledge and develop the skills and attitudes necessary for planning and carrying out comprehensive nursing care for sick persons of all ages in the hospital or community, including that portion of medical treatment which is the responsibility of nursing personnel.
3. To develop the ability to think and act independently and to accept responsibility as an individual, a nurse and a citizen.
4. To develop an ability to teach people sick or well in measures which contribute to total health.
5. To develop the ability to co-operate with others in the

hospital and community in the care of the sick, prevention of disease and promotion of health.

6. To acquire an understanding of how to plan and implement a pattern of nursing administration in a ward or public health unit, and an ability to supervise and guide auxiliary personnel who are part of the nursing team.
7. To develop an ability to establish priorities in patient or community needs for nursing services, and where, because of lack of staff or material resources all needs cannot be met, to select and meet the priority needs to the very limit of resources available.
8. To acquire sufficient understanding of the roles and functions of auxiliary nursing personnel for her to be able to participate in these training programmes according to the level of her ability.
9. To acquire a knowledge of the development of the nursing profession and current trends which will promote professional understanding and assist her in planning her future education.

SYLLABUS FOR THE COURSE IN GENERAL NURSING

		Minimum hours for formal instruction (theory and practical)	
I.	Basic Sciences:		
	Anatomy and Physiology	80	
	Physics and Chemistry	30	
	Microbiology	30	
	Pharmacology	15	
	Nutrition	30	
	Psychology	20	
II.	Principles and Practices of Nursing:		
	Fundamentals of Nursing	150	
	Elements of Nursing Administration	20	
	Health Teaching	10	
III.	Nursing:		
	Introduction of Medical Sciences	15	
	Medical Nursing		
	Surgical Nursing	200	
	Maternal and Child Nursing	15	(maternal)
		35	(Child)
	Psychiatric Nursing	15	
	Community Nursing	20	
	Emergency Nursing Including First Aid	20	
IV.	Commmunity Organisation:		
	Elementary Sociology and Economics	15	
	Personal and Environmental Health	35	
	Health and Social Services of India	20	
V.	Professional Understanding:		
	History of Nursing	10	
	Professional Adjustments (1)	10	
	Professional Adjustments (2)	8	
	Professional Trends	5	
		808	

CLINICAL EXPERIENCE

Students should have clinical experience in each of the following areas of the minimum time stated:

Medical Nursing (including communicable diseases)	10 months
Surgical Nursing (including gynaecology 1 month, and operating room 2 months)	11 months
Child Nursing	3 months
Out-Patient Department	1 month
Community Nursing	2 months
Elective	3 months

Women students should have at least 6 months experience in the nursing of men.

Clinic experience for men students should mainly be in the nursing of men and to children up to 12 years. Additional experience in tuberculosis, operating theatre or any of the specialities may be given for a maximum of three months in each of 2 specialities instead of the nursing of women.

APPENDIX 1b

THE INDIAN NURSING COUNCIL SYLLABI

FOR MIDWIFERY COURSE

THE INDIAN NURSING COUNCIL SYLLABI FOR MIDWIFERY COURSE

PURPOSE OF COURSE

To provide an educational programme in midwifery for the qualified nurse which will prepare her to function as a nurse/midwife in the hospital or community.

GENERAL OBJECTIVES

To help the nurse develop the ability to:

1. Conduct a normal delivery and give such ante-natal and post-natal care to a mother as normally comes within the scope of a nurse-midwife.
2. Recognise deviations from the normal and take appropriate action.
3. Participate in the maternal and child health activities of a hospital or health care.
4. Supervise and guide auxiliary midwifery personnel.

Duration of course and eligibility

The duration of the course shall be six months with a minimum of 70 hours formal instruction. Candidates shall be qualified nurses.

Clinical Experience

During the period of training, each student midwife shall:

1. Have a minimum of four weeks experience in ante-natal wards and four weeks in the post-natal wards (including newborns);
2. Conduct ante-natal examinations on not less than 30 women;
3. Receive clinical instruction in the conduct of labour, witnessing not less than ten deliveries before conducting one herself;
4. Conduct not less than 20 deliveries, at least five of these being in the patients own home;
5. Have practice in performing an episiotomy and suturing a first degree tear;
6. Nurse not less than 20 lying-in women and their babies during the puerperium at least five of these being attended to in their own homes;
7. Be required to make five vaginal examinations.
8. Have a minimum of five attendances at an ante-natal and a post-natal clinic;

APPENDIX 2a

FORM FOR NURSING ASSESSMENT

FORM FOR NURSING ASSESSMENT

PERSONAL HISTORY

Name of the Hospital | Ward | Number

Name of the patient | Sex | Age

Caste | Religion

Address | Date of admission

Name of the guardian : Father/Husband | Date of Discharge

Address | G. P/Consultant

MEDICAL HISTORY

Past

Present

Diagnosis

Reason for admission

Allergies | Operations

Knowledge of patient/family about his or her condition

Reaction of patient/family to hospital admission

SOCIAL HISTORY

Occupation | Marital status

Children | Other dependents

Housing conditions

Community resources : Community Nurse/Health visitor

Social services/Village doctor

RECREATIONAL ACTIVITIES

RELIGIOUS PRACTICES OR BELIEFS

APPENDIX 2b

FORM FOR NURSING ASSESSMENT

ACTIVITIES OF DAILY LIVING

ACTIVITIES OF DAILY LIVING

NUTRITION

ELIMINATION

HYGIENE

MOBILITY

BREATHING

SLEEP

OTHER AREAS OF ASSESSMENT

a. SENSES

b. EMOTIONAL STATE

GENERAL ASSESSMENT ON ADMISSION

INFORMATION OBTAINED FROM PATIENT/RELATIVE OR BOTH INVOLVED

SIGNATURE DATE

APPENDIX 3

FORM FOR NURSING CARE PLAN

NAME OF THE PATIENT : WARD : NUMBER :

Date	Problem	Objective	Care Plan	Date	Evaluation	Signature

APPENDIX 4

COURSE OUTLINE FOR IMPLEMENTING SYSTEMATIC NURSING IN SELECTED HOSPITALS IN INDIA

COURSE OUTLINE FOR IMPLEMENTING SYSTEMATIC NURSING IN SELECTED HOSPITALS IN INDIA

GROUPS

1. Nurse Administrators and Nurse Educators
2. Trained Nurses and Auxiliary Nurse Midwives
3. General Nursing Students

TIME ALLOTED

16 hours between January and April 1985, for each group.

AIM

To prepare nurses adequately to implement systematic nursing in selected hospitals in India

OBJECTIVES

1. To acquire knowledge of the changing health care delivery system in India and the expanding role of nurses in the health care delivery system
2. To understand the concept of comprehensive health care, holistic care and individualised care.
3. To acquire knowledge of systematic nursing.
4. To learn about the importance of systematic documentation and its application.
5. To acquire skills in communication thus enabling the maintainance of good interpersonal, inter-professional relationships between nurses and patients and their families and other members in the health care system.
6. To define the steps of systematic nursing and to discuss the value of implementing it in day to day nursing practice.
7. To consider change in nursing practice in India from traditional nursing to systematic nursing.
8. To assess the value of 'holistic' care.

UNIT 1 - INTRODUCTION TO THE COURSE

Objectives

1. To acquire knowledge of the changing health care delivery system in India and the expanding role of nurses in India.
2. to understand the concept of holistic care and individualised care and develop desirable attitudes in order to practice the same in the clinical field.
3. To understand the value of implementing systematic nursing in nursing practice.
4. To understand the value of using records in nursing practice.

UNIT II - NURSING PRACTICE AND SYSTEMATIC NURSING

Objectives

1. To introduce problem-solving and its use in clinical nursing practice.
2. To have a better understanding of patients as individuals, and an appreciation of the use of individual approaches in caring for patients.
3. To understand their role in the health care system.
4. To learn to maintain good inter-personal and inter-departmental relationships.
5. To learn to use models in nursing pratice.
6. To understand the value of systematic nursing and its appropriate use in clinical practice.

UNIT III - SYSTEMATIC NURSING - FIRST PHASE - ASSESSMENT

Objectives

1 To develop skills in collecting personal and medical data and interviewing patients.

2. To learn to identify patient's problems.

UNIT IV - SYSTEMATIC NURSING - SECOND PHASE - PLANNING

Objectives

1. To learn to analyse and prioritise the patient's problems.
2. To learn to categorise the patient's problems.
3. To learn to use holistic approach in planning care.
4. To learn to use standard care plans.
5. To learn team approach in caring for patients.
6. To learn and develop skills and appreciate the importance of documentation in nursing.

UNIT V - SYSTEMATIC NURSING - THIRD PHASE - IMPLEMENTATION

Objectives

1. To learn to implement the actual care planned.
2. To practice handing over the care of the patients to other nurses who relieve them.
3. To appreciate patients participation in implementing the care.
4. To learn to maintain confidentiality about patients.
5. To develop skills in documentation.

UNIT VI - SYSTEMATIC NURSING - FOURTH PHASE - EVALUATION

Objectives

1. To acquire knowledge of evaluation.
2. To learn to evaluate the outcome of the care given to patients.
3. To appreciate and demonstrate patients' participation in evaluating the care.
4. To be able to reassess the problems in nursing for further planning and improvement of patient care.

UNIT VII REVIEW OF SYSTEMATIC NURSING

Objectives

1. To review the whole course on systematic nursing in order to assess the knowledge gained and attitudes developed towards systematic nursing.

2. To assess the attitudes of nurses towards systematic nursing.

3. To give them an opportunity to role play the performance of implementation of systematic nursing.

4. To assess the ability of nurses to comprehend the various steps of systematic nursing, assessing patients' problems, prioritising the problems, planning the care, implementing and evaluating the outcome of care.

UNIT VIII A REVIEW OF THE WHOLE COURSE

Objectives

1. To identify change areas in nursing practice.

2. To introduce change in nursing practice.

3. To encourage nurses to express their doubts about systematic nursing.

PLAN FOR THE TEACHING SESSIONS

UNIT No	COURSE CONTENT (TOPIC)	HOURS	ACTIVITY	AIDS
I	INTRODUCTION	2		
	1. Health care delivery system in India and the expanding role of nurses		Discussion	Board Posters
	2. The concept of holistic are comprehensive care, individual care		Discussion	Board
	3. Introduction to systematic nursing		Discussion Questions and Answers	Slide Projector
	4. Use of records		Discussion Questions and Answers	
II	NURSING PRACTICE AND SYSTEMATIC NURSING	2		
	1. Problem-solving		Discussion Questions and Answers	Board
	2. People as patients and as individuals		Discussion Questions and Answers	
	3. The role of the nurse		Discussion	Board
	4. The nurse patient relationships		Questions and Answers	
	5. Inter-departmental relationships		Questions and Answers	
	6. Models for nursing practice		Discussion	Overhead-Projector
	i) Activities of living model (Roper, Logan, Tierney)		Discussion	Overhead-Projector
	ii) The self-care model (OREM)			
	iii) The stress-adaptation model (Saxton and Hyland)			Posters
	iv) The holistic model (SIRRA)			Posters
III	SYSTEMATIC NURSING - FIRST PHASE ASSESSMENT	2		
	1. An admission interview		Discussion	Role Play
	2. Identifying problems		Questions and Answers	
	3. Introduction to planning		Discussion Questions and Answers	

UNIT No	COURSE CONTENT (TOPIC)	HOURS	ACTIVITY	AIDS
IV	SYSTEMATIC NURSING - SECOND PHASE PLANNING	2		
	1. Analysing and prioritising the problems		Discussion Questions and Answers	
	2. Using standard care plans		Discussion	Records
	3. Holistic approach		Discussion	
	4. Team approach		Discussion	
	5. Planning appropriate nursing action		Discussion Writing	Records
	6. Documentation		Nursing Care Plan Case file Discussion with Doctors Chaplain	Overhead-Projector
V	SYSTEMATIC NURSING - THIRD PHASE IMPLEMENTATION	2		
	1. Giving the planned care		Discussion Questions and Answers	
	2. Handing over and taking over of the nursing care at bed side and in nurses' station			
	3. Including patient in the handing over of nursing care from one nurse to the other		Demonstration in actual ward situation	
	4. Maintaining confidentiality throughout the process			
VI	SYSTEMATIC NURSING - FOURTH PHASE EVALUATION	2		
	1. Importance of evaluation		Discussion	Overhead-Projector
	2. Method of Evaluation		Questions and Answers	Records
	3. Evaluation in the clinical area setting		Demonstration at bedside	
	4. Inclusion of patient in evaluation of care			
	5. Deciding on further action to improve the care			

UNIT No	COURSE CONTENT (TOPIC)	HOURS	ACTIVITY	AIDS
VII	REVIEW OF SYSTEMATIC NURSING	2		
	1. Identifying patients nursing problems		Role play	Records
	2. Prioritising problems		Documents	Assessment form
	3. Setting goals and planning care		Documents	Care plan
	4. Implementing care		Discussion	
	5. Evaluating care		Documents	
	6. Reassessment		Questions and Answers	
VIII	A REVIEW OF THE WHOLE COURSE	2		
	1. Identifying the change areas		Questions and Answers	Overhead-Projector
	2. Implementing the change in nursing practice		Questions and Answers	Slide-Projector
	3. Assessing their willingness to change		Questions and Answers	Records
	4. Providing support for continuation of systematic nursing			

APPENDIX 5

FORM FOR EVALUATION OF THE TEACHING PROGRAMME

FORM FOR EVALUATION OF THE TEACHING PROGRAMME

Dear Participant,

Thank you very much for attending the sessions.

Please give your frank opinion about the course that you had during these three weeks. Please circle the number of response that you think is suitable.

1. The course on systematic nursing was:

   i useful
   ii useful to some extent
   iii very useful
   iv not useful

2. The sessions were:

   i very brief
   ii just right
   iii long
   iv too long

3. Which of the sessions did you find most useful?

   i assessment
   ii planning
   iii implementation
   iv evaluation

4. The session on models was:

   i not difficult
   ii just right
   iii difficult
   iv very difficult

5. Problem oriented-approach in nursing:

   i can be practised
   ii difficult to practice
   iii impossible to practice

6. The content of the course was:

   i inadequate
   ii adequate

7. Two sessions in a week were:

   i not enough
   ii just right
   iii too much

8. On the whole the course was:

   i interesting
   ii uninteresting

9. On the whole the course was:

   i relevant
   ii irrelevant

10. Modular form of teaching was:

    i helpful
    ii not helpful

11. The activities planned for the session were:

    i appropriate
    ii inappropriate

12. Implementing systematic nursing is:

    i possible
    ii impossible

13. Do you think that systematic nursing is a better approach to patient care?.

    i yes
    ii no
    iii doubtful

14. Do you feel the need to change from task-oriented nursing to systematic nursing?

    i Yes
    ii no
    iii doubtful

    If your answer is yes, please express your opinion in three sentences.

Thanks again -

E. Sirra

APPENDIX 6

PLAN OF PREPARATIONS FOR THE STUDY

PLAN OF PREPARATIONS FOR THE STUDY

YEAR	MONTH/WEEK	NAME OF HOSPITAL	ACTIVITIES TO BE CARRIED OUT
1984	December 3rd week		
	17th and 18th	Narsapur Christian Hospital (NCH)	1. Meeting with the Hospital Administrative Committee 2. Meeting with the Nursing Superintendent and the Director of Nursing Education
	19th and 20th	Christian Medical Cre. Pithapuram (CMC)	3. Assessment of change-environment
1985	January 3rd and 4th week	NCH	1. Orientation to the hospital 2. Participant observation 3. Informal discussions and unstructured interviews with nurses and patients 4. Collection of demographic data 5. Assessment of change agent's motivation and resources 6. Assessment of record system 7. Formation of steering groups 8. Talk on systematic nursing - trained nurses and students 9. Meeting with nurse tutors - introduction to systematic nursing
1985	February 1st and 2nd week	CMC	Repeat of the above. In addition formation of the advisory group
1985	February 3rd and 4th week	NCH	1. Pre-testing of the Nursing Assessment Forms 2. Pre-testing of the Nursing Care Plans 3. Pre-testing of the teaching package 4. Steering group meeting 5. Meeting with the Hospital Administrative Committee
1985	March 1st and 2nd week	CMC	Repeat of the above
1985	March 3rd week	NCH	Advisory group meeting

APPENDIX 7

SCHEDULES FOR PARTICIPANT OBSERVATION AND UNSTRUCTURED INTERVIEWS

SCHEDULES FOR PARTICIPANT OBSERVATION AND UNSTRUCTURED INTERVIEWS

Nurses involved and Professional Status	Area being observed and explored	Discussion	Questions
Nursing Superintendents	The hospitals	1. Facts about the hospitals 2. Administrative structure of the hospitals 3. Nursing service administration 4. Inservice education	
Directors of Schools of Nursing	The Schools of Nursing	1. The Nursing School administration 2. Nurses' training programme 3. Students' clinical experience	
Ward sisters	The ward sisters	1. Facts about the ward sisters; preparation and experience	
	The wards	1. Facts about the wards 2. Ward environment 3. Staffing pattern of the ward 4. Patient admission procedure 5. Ward routine 6. Record system and documentation 7. Student supervision 8. Ward management	
	Nursing practice; the organisation of work pattern		1. How would you describe your work as a ward sister? 2. How do you allocate work to nurses in your ward? 3. How do nurses know their work? Is there a written assignment? 4. Do you supervise the ward work? How do you find out what work has been done?

Nurses involved and Professional Status	Area being observed and explored	Discussion	Questions
	Perceptions about existing nursing practice		5. Do nurses in your ward use time talking to patients? Do they communicate as they work at the bedside? 6. Do patients expect nurses to use time finding out about their problems?
	Perceptions about the new approach; systematic nursing		7. Is patient allocation workable in your ward? 8. Would it be possible to practice patient allocation if you had more nurses?
Ward sisters	Nursing practice		9. Are you happy with the existing nursing practice? 10. What do you think of this new approach, systematic nursing? 11. Do you have any comments?
	Communication system Inter-personal relationship Inter-professional relationship Nurse-patient relationships	1. Facts about communication system 2. Facts about inter-personal relationships 3. Facts about inter-professional relationship 4. Facts about nurse-patient relationships	

Nurses involved and Professional Status	Area being observed and explored	Discussion	Questions
Trained nurses	Nursing practice – Perception of her role Perceptions about existing nursing practice Perceptions about the new approach	Facts about ward nursing and patient care	1. What would you consider is your primary responsibility as a trained nurse? 2. Do you find time to talk to your patients and find out their problems? 3. What is your opinion about systematic nursing or problem-oriented nursing practice?
General nursing students	Perceptions about nursing Perceptions about systematic nursing	Facts about nursing, training and experience Discussion about case studies	1. What does nursing mean to you? 2. How do you plan care for your patients? 3. How many case studies did you do? 4. What difference did you find between the present ward nursing and case study model? 5. Did you find the case study model useful? 6. What do you understand by systematic nursing?

APPENDIX 8a

PLAN FOR THE MAIN STUDY

PLAN FOR THE MAIN STUDY

YEAR	MONTH/WEEK	NAME OF HOSPITAL	ACTIVITIES TO BE CARRIED OUT
1985	August 1st week 6th and 7th 8th and 9th	1. Narsapur Christian Hospital (NCH) 2. Christian Medical Centre, Pithapuram (CMC)	1. Meeting with the Hospital Administrative Committee 2. Meeting with the Nursing Superintendent and the Director of Nursing Education 3. Meeting with the steering group
1985	August 2nd 3rd and 4th week	CMC	1. Implementing teaching package 2. Stabilising patient allocation 3. Developing suitable record system 4. Preparation of internal change agents
1985	September 1st 2nd and 3rd week	NCH	Repeat the above In addition advisory group meeting
1985	October 1st and 2nd week	CMC	1. Meeting with the steering group 2. Implementing systematic nursing (change)
	3rd and 4th week	NCH	Repeat the above
1985	November 1st and 2nd week	CMC	1. Assisting with change process 2. Formation of support groups 3. Stabilising change 4. Advisory group meeting
	3rd and 4th week	NCH	Repeat the above
1985	December 1st week	CMC	Stabilising change
	2nd week	NCH	Repeat the above
1986	January 2nd week	CMC	1. Evaluate the outcome of change 2. Meeting with the HospitalAdministrative Committee 3. Withdrawal from the hospital
1986	January 4th week	NCH	Repeat the above

APPENDIX 8b

PLAN FOR IMPLEMENTING SYSTEMATIC NURSING IN PHASES

PLAN FOR IMPLEMENTING SYSTEMATIC NURSING IN PHASES

Year	Month and week	Name of the Hospital and Wards	Phase
1985	August 2nd and 3rd week August 4th week September 1st week	NCH	Teaching systematic nursing Assessment of the change environment Preparation of internal change agents Stabilising patient allocation Record review
	September 2nd and 3rd week	NCH	Phase One Nursing Assessment
	September 3rd and and 4th week	CMC	Nursing assessment
	September 4th and and October 1st week	NCH	Phase Two Writing care plans
	October 1st and 2nd week	CMC	Writing care plans
	October 2nd, 3rd and 4th week	NCH	Phase Three Implementation
	October 3rd, 4th and 1st week November	CMC	Implementation
	November 1st, 2nd and 3rd week	NCH	Phase Four Evaluation
	November 2nd, 3rd and 4th week	CMC	Evaluation
	December	NCH and CMC	All four phases
1986	January	NCH and CMC	Maintenance phase

APPENDIX 9

SCHEDULES FOR DISCUSSIONS, INTERVIEWS AND OBSERVATIONS

(Before Commencing the Main Study)

SCHEDULES FOR DISCUSSIONS, INTEREVIEWS AND OBSERVATIONS

(Before Commencing the Main Study)

Nurses involved and professional status	Area being observed and explored	Discussion	Questions
Nursing Superintendents	Change environment The study wards	1. Review of the changes that have been introduced during the preparatory study	
Directors of Schools of Nursing		2. Re-orientation of teaching-schedule; systematic nursing	
		3. Teaching schedule for internal change agents	
		4. Record review system	
		5. Plan for the main study	
Steering groups	The wards Nursing practice Patient allocation	1. Practicalities of patient allocation 2. Usage of Nursing Assessment Forms 3. Usage of Nursing Care Plans	
	Views about systematic nursing	4. Case presentations 5. Attitudes, opinions, suggestions about No. 1, 2, 3 and 4	

Nurses involved and professional status	Area being observed and explored	Discussion	Questions
Ward sisters	Nursing practice Views about patient allocation and systematic nursing		1. Are you able to carry on with patient allocation? 2. Are nurses in your ward happy about it? 3. What problems have you encountered? 4. Has it made any difference in patient care? 5. What do patients say about it? 6. Have any other changes occurred in nursing practice since December 1984 to date? 7. What is your opinion about systematic nursing? 8. Do you think that we can change to this new approach? 9. Have you any comments to make?
Trained Nurses	Nursing practice Patient allocation Systematic nursing		1. Do you practice patient allocation? 2. Do you have any probems in practising patient allocation? 3. Are you happy to continue with it? 4. What do your patients feel about it? 5. Do you think that we could change to systematic nursing?

Nurses involved and Professional Status	Area being observed and explored	Discussion	Questions
General nursing students	Nursing practice Patient allocation Systematic nursing Attitudes		1. Do you practice patient allocation? 2. Have you any problems in carrying on with patient allocation? 3. Do you ever feel that you are forced to do it? 4. Were you able to do any nursing assessments, care plans and case presentations? 5. Would you like to continue with it? 6. Do you like the change to systematic nursing?

APPENDIX 10

COURSE OUTLINE FOR PREPARATION OF INTERNAL CHANGE AGENTS

COURSE OUTLINE FOR PREPARATION OF INTERNAL CHANGE AGENTS

GROUP — Steering group (nurse leaders, sister tutors and ward sisters)

TIME ALLOTMENT — 6 hours between August and September, 1985

OBJECTIVE — To prepare nurses as internal change agents to help with the change process and to stabilise and maintain change in the absence of the external change agent (the researcher)

AIMS

1. To acquire the knowledge about change as a whole.
2. To understand the role of a change agent in a broader sense and assume the role of internal change agents.
3. To understand the process of change and develop skills in managing the change process.

UNIT 1 INTRODUCTION TO CHANGE

Objectives

1. To understand the meaning of change and the types of change.
2. To acquire knowledge about planned change in order to apply it in the study wards (clinical situation).

UNIT 2 CHANGE AGENT AND THE NURSE

Objectives

1. To understand the meaning of a change agent and the types of change agents.
2. To understand the functions and the characteristics of a change agent.
3. To appreciate their role as internal change agents.

UNIT 3 CHANGE PROCESS AND THE NURSE

Objectives

1. To acquire knowledge about change process.
2. To understand the change agent system and client system.
3. To develop skills in assuming their role as internal change agents and demonstrate helping roles and strategies to be used in the change process.

PLAN FOR THE SESSIONS

UNIT NO.	COURSE CONTENT (TOPIC)	HOURS	ACTIVITY	AIDS
I	Introduction to change 1) Definition of change 2) Types of change 3) Planned change	2	Discussion Questions and answers Questions and Answers	Board and Posters
II	Change agent and the nurse 1) Definition and meaning 2) Change agent i) Internal change agent ii) External change agent 3) Characteristics of the change agent 4) Functions of the change agent 5) Nurse as a change agent	2	Discussion Questions and Answers Questions and Answers Questions and Answers Questions and Answers Questions and Answers	Board and Posters
III	Change Process and the Nurse 1) Change process 2) Change agent and client system 3) Role of the nurse as a change agent i) helping roles ii) strategies	2	Discussion Questions and Answers Questions and Answers Questions and Answers	Board and Posters

APPENDIX 11

AGENDA FOR THE ADVISORY GROUP MEETING

AGENDA FOR THE ADVISORY GROUP MEETING

November 15th, 1985

Discussion and Exchange of Ideas on the Following Matters

1. Patient allocation (patient care assignment), merits and demerits, problems encountered, stability of patient allocation.
2. Systematic nursing in phases.
3. Case presentations.
4. Bedside reports.
5. Records - improvements and review process.
6. Changes that have occurred thus far from December 1984 to date.
7. Attitudes of nurses toward this new approach - satisfaction and dissatisfactions.
8. Attitudes of patients - satisfactions and dissatisfactions.
9. Personal opinion
10. Wider scope of implementation.
11. Stabilising change.

Brief comments from steering groups about systematic nursing, improvements made, changes which had occurred and problems encountered.

APPENDIX 12

THE WRITTEN REPORTS BY STEERING GROUP MEMBERS

PERCEPTIONS OF OUTCOME OF CHANGE

THE WRITTEN REPORTS BY STEERING GROUP MEMBERS - PERCEPTIONS OF OUTCOME OF CHANGE

Nursing Superintendent 1

"The coming of the researcher to introduce systematic nursing was viewed with some apprehension as we were aware of various deficiencies. We are grateful to her for choosing our hospital for her field work, for her great understanding of our problems, for her gentle way of suggesting where things could be improved without putting undue pressure on us. The preparation for field work came at a strategic time for transition when we were upgrading from our two year Auxiliary Nurse Midwifery course in the vernacular to the three year General Nursing and six months midwifery course in English. The problems were communication as the ANM's had limited English and lack of senior staff to supervise. By the time the researcher started her main study our first group of eight nurses had graduated and participating in the change to systematic nursing has been a real challenge to them and greatly enjoyed. Many improvements have come through the introduction of sytematic nursing:

- patient allocation in place of job allocation has brought a greater sense of satisfaction to nurses and patients

- there has been a marked improvement in the nurse-patient relationship

- previously the hospital had a name for good nursing care, but this has been enhanced by the changes introduced

- bedside reports have been introduced which made handing over more meaningful and complete

- case presentations have challenged even students who normally do not readily participate and provided an excellent learning and teaching opportunity

- records have improved but still need more attention. It has also brought an awareness of the need for permanent records. Extra documentation does take more time, especially for those who are still struggling with the English language.

I would like to thank the researcher for all she has taught us."

Nursing Superintendent 2

"Thank you for bringing systematic nursing into our hospital as it made us review and renew our nursing knowledge and practice. Thank you for all that you had done for our nursing department and for your understanding of

our problems and frustrations. The sympathy shown, encouragement and support given in our work made us feel you are one with us in sharing and participating in our work."

Director of Nursing Education 1

"I am very happy that our hospital was chosen for this project - 'Implementation of systematic nursing'. When the researcher first met us and proposed this new approach, I thought to myself, 'what was it that we were not doing?' But after attending the lectures on systematic nursing I became aware of our deficiencies in our nurse education programme. I thoroughly enjoyed the lectures and was convinced that nursing is emerging as a science-based profession. I was convinced that this scientific approach would really cater for the patient's individual needs as opposed to the task-oriented nursing. Systematic nursing was introduced in our hospital and it is going on successfully. The nurse-patient relationships have improved tremendously. Our nurses find bedside reports very useful. Staff and students are gaining more knowledge by participating in clinical teaching and presenting their patients. They are also reading more books now. Record system has improved, nurses write nursing assessment on activities of daily living, nursing care plans and progress notes. As a concluding remark I can honestly say that systematic nursing is very useful and relevant to our nursing programme."

Director of Nursing Education 2

"Systematic nursing is the best approach to patient care. Nurses gained more knowledge about their patients and were able to plan better nursing care. They were able to assess patients' problems, write nursing care plans, give planned nursing care and evaluate the outcome of care given. Our students expressed better satisfaction by giving planned, individualised care to their patients. We adapted nursing assessment and nursing care plans forms as a standard format for our students' care studies which is a requirement by the Board of Nursing Education, South India. We were motivated to plan and conduct clinical teaching and discussions which our students and tutors found a useful learning/teaching experience. Our classroom teaching was also changed from a medical model to a problem-oriented model where we focussed on patient-centered approaches. Better satisfaction was expressed by patients. It gave them a sense of belonging as the patients were given individualised care. Finally, I would like to say that we have greatly benefitted by this project."

Nursing Superintendent '1' and the Director of Nursing Education '1' belong to NCH and the '2's' belong to C.M.C.

Sister Tutor 1

"Several changes occurred after introducing systematic nursing. Formerly, students were learning theory. There was very little co-relation between theory and practice, but systematic nursing helped to bridge this gap. Now students are able to make nursing assessment, write nursing care plans, give planned care and evaluate the outcome of care. Identification of patients' problems led to the problem-solving approach. Comprehensive nursing care is given to patients. Tutors and staff also gained more nursing knowledge. Patient allocation helped to improve nursing care. Mutual trust and confidence is being built between patients and nurses. Bedside reports during nursing rounds made systematic nursing more meaningful to the nurses. Case presentations and clinical teaching have become a regular feature. Both staff and student nurses are participating. Record system has improved. Students have benefitted by better supervision and guidance by tutors and ward sisters."

Sister Tutor 2

"Systematic nursing has helped tutors to gain new knowledge in nursing. This enabled us to gain better supervisory skills to help, guide and evaluate students. It also helped us to develop a sense of responsibility towards students and patients. The establishing of support groups improved communication between nurses. The quality of nursing care improved. Nursing assessment and nursing care plans helped to individualise patient care. Nurses developed creative thinking and became more appreciative of patients' problems. They were able to participate in clinical teaching. Interest and enthusiasm was shown by them. The nurses gained more knowledge. Patients expressed better satisfaction about the care they received."

Sister Tutor 3

"Systematic nursing was implemented in our hospital and I am very happy about it. Students are able to give total care to their patients by assessing physiological, psychological, social and spiritual problems. The Researcher, as a good leader prepared and directed the tutors to introduce this new approach. Her effective communication with various members of staff in the hospital made a definite impact on this project. Handover and accountability of care improved. Students are writing care studies and actively participating in clinical teaching."

Sister Tutor 4

"Systematic nursing is a very good method of nursing. It helped the nurses to give better nursing care to patients

and patients expressed better satisfaction. Nurses gained knowledge about their patients and their activities of daily living while taking their history. They were able to plan care accordingly after identifying their problems. Bedside reports during hand over procedure enhanced the nurses accountability for the care given by them. It helped for better organisation of the ward work. Documentation has improved but it is taking more time. Nurse-patient interaction improved. Shortage of staff is a problem. If the nurse patient ratio is 1:5 we could successfully carry on with systematic nursing."

Sister Tutor 5

"It was good we started systematic nursing in our hospital. It helped us to understand patients' problems and plan care accordingly. It provided more learning experiences for staff and students. Our hospital gained a good reputation for better patient care, partly because of the implementation of systematic nursing. Shortage of staff nurses is a problem. Otherwise we are happy to continue with it."

Sister Tutor 6

"Systematic nursing helped nurses to give comprehensive care to patients. Nurses knowledge of their patients and nursing increased. I am happy to keep abreast with these new trends. I am happy to educate students on systematic nursing. Tutors, staff and students have benefitted by it. It enhanced the hospital reputation."

Sister Tutor 7

"Implementation of systematic nursing gave opportunity to staff and student nurses to know more about their patients' problems, plan and give complete care to patients. It improved the nursing knowledge of tutors and students. Shortage of staff was one of the problems we faced."

Sister Tutor 8

"Systematic nursing brought in patient-centered approaches in nursing. I found two advantages: 1) patients received better nursing care; and 2) nurses gained more knowledge. They were able to understand patients better and showed more interest in their patients. Students still struggle with the English language and find documentation a bit difficult. Sometimes nurses notes written by them make no sense. Nurse-patient relationships and interactions improved. Nurses now understand their patients better. They gained more confidence in caring for their patients. The clinical teaching programme gave tutors and ward sisters a completely new insight into systematic nursing."

Tutors 1-3 represented N.C.H. and 4-8 C.M.C. One tutor left N.C.H. before the completion of the main study. Hence her opinion could not be obtained.

Three ward sisters in N.C.H. and six in C.M.C. expressed their opinion in writing about systematic nursing.

Ward Sister 1

> "Systematic nursing was implemented in our medical and surgical wards step by step. I feel that nursing has now taken a scientific approach. Nurses' knowledge about patients improved. This helped to make a systematic assessment, plan, implement and evaluate the outcome of care. Patients are recognised as individuals. Individual nursing care plans are based on the physiological, psychological, social and spiritual problems identified. Nurses are now capable enough to continue with case presentations and bedside reports. Systematic nursing not only improved nursing theory, but also the stature of the nursing profession. Scientific advance made through research studies of this type are very useful for the development of the nursing profession. I am indeed glad that the nursing leaders of our country like the researcher are now seriously thinking about the inadequacy of the present system of the patient-care method, and have found ways and means of bringing about necessary changes. When I consider the patients' viewpoint, they are satisfied by the nursing care because individual care is being given to them and also they are recognised as people. Above all the researcher's constant encouragement and appreciation inspired the nurses to follow this new approach effectively in our hospital. I am thankful for all her efforts in introducing systematic nursing in patient care. Finally my good wishes for the success of this new approach. I hope that those practising it will find much joy and satisfaction in taking care of patients".

Ward Sister 2

> "Systematic nursing is in regular use now. It is helpful for nurses and patients."

Ward Sister 3

> "Quality of nursing care is much improved through the implementation of systematic nursing in our hospital. We are also practising case presentations."

Ward Sister 4

> "There are more advantages than disadvantages in the use of systematic nursing. Systematic nursing directed us to gather information about our patients' personal, family, social, medical history and other aspects like psycho-

logical problems and religious beliefs. I was enabled to appreciate in a new way the adverse effect of psychological and family problems, such as poor socio-economic conditions on our patients' health and illness. Assessment on activities of daily living helped me to identify the patients' problems and to decide on the assistance the patients needed in performing these activities. This helped to plan individual care and help patients to recover as rapidly as possible. Patients went home better educated in health matters, a changed outlook and satisfied. Shortage of nursing staff had been a problem."

Ward Sister 5

"Assessment of activities of daily living as well as other relevant information helped me to plan comprehensive and individualised patient care. Nurse-patient relationships greatly improved. This resulted in better satisfaction for both nurses and patients."

Ward Sister 6

"Systematic nursing provides complete care to patients. Patients expressed satisfaction with this new approach."

Ward Sister 7

"I am happy to continue with systematic nursing. The quality of nursing care has improved. I found no disadvantages."

Ward Sister 8

"Systematic nursing has proved to be a valuable approach to nursing practice. As well as high-lighting the importance of giving patients planned and individualised care, it also points out how essential it is to pursue preventive measures and to promote good health both in the patients and their relatives. Following this method has given greater satisfaction to all concerned."

Ward Sister 9

"Systematic nursing gave me new knowledge that is to asses and identify patients problems, plan care, implement and evaluate the outcome of care given. This helped nurses to plan individual and complete nursing care".

APPENDIX 13

AN ACCOUNT OF THE INFORMAL TALKS WITH THE TRAINED NURSES

AN ACCOUNT OF THE INFORMAL TALKS WITH THE TRAINED NURSES

Trained Nurse 1

"I noticed quite a lot of changes in my ward. Nursing assessment and care plans have become regular features. Patients feel that nurses are showing more interest in them and giving good care and attention. I am quite happy with systematic nursing."

The researcher asked the trained nurse whether she was able to spend some time with her patients. To this the nurse said:

"I am able to spend more time with my patients communicating and finding out their problems. I have better satisfaction now."

Trained Nurse 2

"I like systematic nursing. Three years ago, I worked in another hospital which had a nurses chart in which nurses wrote patients' complaints each day, but here there was nothing like that until you introduced the records. There were no written reports. But now I see a lot of changes. I really like this new method. Now nurses spend more time with their patients taking histories, writing nursing care plans, giving health teaching etc. ANM's don't seem to take as much interest as we do. I enjoy these bedside reports. It makes nursing more meaningful; reassessing the patient and evaluating the outcome of care given. Patients' relatives also co-operate and participate in patient care. Patients are quite satisfied, especially with students. Students are allocated a fewer number of patients than us staff nurses. So they spend more time with patients than we do. Nursing care is getting more individualised now."

Trained Nurse 3

"I feel that I am really doing nursing now. Previously I did tasks, regardless of patients' problems and individuality. But now I am giving nursing care to people that is the patients."

The researcher asked the nurse to further explain what she meant by giving care to people, the nurse replied:

"I am able to assess patients' problems and write nursing care plans. Case presentations are interesting."

Trained Nurses 4 and 5

Trained nurses 4 and 5 gave individual accounts but they expressed similar views. Views expressed by one nurse are paraphrased here:

> Previously they did not know much about their patients. Doing tasks was the main concern. But now with this new method they got to know their patients better. They were able to identify patients' physiological, psychosocial and spiritual problems; write nursing care plans; give planned care to patients, and finally evaluate the care given. A lot of information could be obtained while working at the bedside and communicating with patients. Systematic nursing was something new to them because they did not have anything like it in their training. They found it interesting and satisfying and said that patients were also happy about it.

Trained Nurse 6

> "Systematic nursing improved nurse-patient interaction. It is educative."

The researcher interrupted the nurse and enquired whether she was able to integrate nursing theory and practice. The nurse said:

> "I only learned in psychology about body mind relationship and about social problems in sociology. But I never applied that knowledge in practice. All this time and I have given only physical care, but now I am able to view patients as a total being and am able to take care of them as total persons and as individuals.

The researcher put another question to the nurse whether she was involving the patient and his family in his care? The nurse replied:

> "Patients are participating in their own care such as taking a bath by themselves. Sometimes the patients' relatives help with bathing, feeding or giving a bedpan. It all depends on patients' ability and interest of the family members to participate in patients' care. It depends on each individual patient. I quite like this method."

Trained Nurses 7 and 8

Informal talks were held with trained nurses 7 and 8 separately. Since they both expressed similar views, one of the talks was paraphrased:

A lot of changes have occurred since the project was started, for example, patient allocation; systematic nursing (assessment, planning, implementation and evaluation); bed side reports; case presentations and introduction of new records. She found documentation time-consuming especially in the beginning, but now she had got used to it. On the other hand, she found it more useful as it was informative and she was able to learn from it more about her patients. This nurse also said that giving hand over was another change and that previously nurses did not bother to give handover before they left. She said that she had greater job-satisfaction with systematic nursing. The nurse also reported that patients and their families were happy and some patients made a point of seeing the nurses to say how grateful they were for the care given.

Trained Nurse 9

An account given by trained nurse 9 is paraphrased here:

Systematic nursing helped to improve communication between nurses and patients. There are better relationships among nurses. The support groups helped them to share ideas, discuss problems and help and motivate each other. Sisters and tutors also help. Systematic nursing is educative and provides continuity of care to patients. The patient is more important now. Systematic nursing made nurses more accountable for their work so patients are not neglected. Work is better organised, patients are getting better care, and the nurse said that she had better satisfaction.

Trained Nurse 10

> "I am following patient allocation. Previously it was not practised all the time, but now I plan to follow it closely and am already finding I know more about the problems of my patients. I am doing assessments, writing nursing care plans, giving planned care and finally doing the evaluation. The sister tutor is helping whenever there is a problem. I am participating in the ward teaching."

The researcher asked the nurse to explain the practicalities of systematic nursing. The nurse said:

> "Sometimes there is too much work to do. There are only two staff nurses in the morning shift. Systematic nursing is workable provided we have enough nurses. My patients are satisfied and I am happy and satisfied with my nursing."

Trained Nurses 11 and 12

Although the researcher held separate talks with trained nurses 11 and 12, they expressed similar views. These nurses reported that they were practising systematic nursing and said that patients were happy about their history being taken, especially with the activities of daily living. Patients thought that nurses were really interested in them and said that they were included in planning their care. Nurses felt that they gained more knowledge about their patients and they found bedside reports interesting. They reported that patients too were participating in bedside reports by expressing their views, for example whether they were feeling better or not or if they had any other problems and so on. When the wards were understaffed, the nurses found documentation a problem. The problem of shortage of staff was expressed. These nurses said that that they found systematic nursing educative and useful and their patients too expressed their satisfaction.

Trained Nurses 13

This nurse said:

> "This is a big ward. We have more surgical patients than the other wards. We are only two staff nurses, in the morning shift. If any emergency occurs we have to leave all the other work and attend to the patient. If the ward sister is off, one of us has to manage the ward. Of course a relief nurse is sent. I am following systematic nursing, there is no doubt it is educative and interesting and I learned a lot. The ward needs more staff for the effective practice of systematic nursing."

Trained Nurse 14

> "Systematic nursing is a good method, but there are far too many records. It takes a lot of time. If there are more nurses that is allright but when there were more nurses, it would be a possibility, but not when we are under staffed. There is regular clinical teaching programme and I am participating in it. Health teaching is given to patients and their family members."

Trained Nurses 15 and 16

Similar views were expressed by trained nurses 15 and 16. Upon being questioned individually these two nurses expressed satisfaction at being involved in the study. One of them said that she was able to learn a lot of new things, for example, assessing patients, writing care plans, and learning how to give individualised patient care. Obviously there was less supervision when the tutor was away on leave and when the ward sister was busy with doctors rounds. However, all in all the nurses were well satisfied with this new approach.

Trained Nurse 17

This nurse was a very senior person. The researcher asked her to express her satisfactions and dissatisfactions about being involved in the study. The nurse said:

> "All you taught us is very good. I was trained a long, long time ago and never learned anything like this before. This new approach is very educative and sounds very academic. Perhaps it is being practised in the west."

The researcher explained about the continued changing concept of nursing in the U.K. The nurse then said:

> "I have not heard anything like it here. It is a very good system and even old people like me, have something to learn from it. As you know, I am writing nursing assessment and nursing care plans. I discuss them with the patients and their families. There is a great satisfaction in nursing this way. Nurse patient relationships and communication have improved. Patients are also happy and satisfied."

Trained Nurses 18, 19 and 20

These nurses expressed similar views. One of them said that she was happy to be involved in the project and said that she greatly benefited from participating in the study. She found systematic nursing educative and learned more about her patients. She also said that she learned more nursing theory and gained more new knowledge by assessing patients on their activities of daily living. She was able to give planned nursing care from the beginning of hospitalisation by doing an early assessment. The nurse also said that she was participating in clinical teaching. She found bedside reports interesting. Her patients did not express any dissatisfactions.

Trained Nurse 21

This nurse worked with ophthalmological patients. She showed great interest in assessing her patients and writing nursing care plans for them. She also participated in clinical teaching. The researcher asked her to express her opinion about systematic nursing. The nurse said:

> "The old methods are changing and new methods are coming into practice for better patient care. Recently, I attended a refresher course on ophthalmic nursing."

The researcher wanted to know more about the workshop and asked the trained nurse whether the sessions had included any aspects of

systematic nursing. She said:

> "There were no discussions which focussed on the patients' needs. It was all about techniques. After attending the lectures on systematic nursing here, I gained a lot of knowledge. I especially work with eye patients. I am able to do assessment, plan individual pre- and post-operative care. Patients and their families appreciate this. I am happy they recover quickly. I also participate in clinical teaching."

APPENDIX 14

QUESTIONNAIRE TO WARD SISTERS ON POST CHANGE ASSESSMENT

QUESTIONNAIRE TO WARD SISTERS ON POST CHANGE ASSESSMENT

Dear Ward Sister,

By now, I hope that systematic nursing will be a regular practice in your ward. Filling in this form will help me to assess the usage of the systematic nursing. Would you be kind enough to encircle your response and return this form to your Nursing Superintendent. You do not have to sign your name, just remain anonymous. Thank you very much.

E. Sirra

- -

In my ward nurses:

1.	Write nursing assessment	Yes	No
2.	Write Nursing Care Plans	Yes	No
3.	Give planned care (implement nursing care planned)	Yes	No
4.	Evaluate the outcome of care	Yes	No
5.	Practise patient allocation	Yes	No
6.	Give bedside reports	Yes	No
7.	Write nurses' notes	Yes	No
8.	Participate in clinical teaching (case presentations)	Yes	No
9.	Patients are content and satisfied	Yes	No
10.	Nurses have increased job satisfaction	Yes	No

Any other comments:

APPENDIX 15

SYSTEMATIC NURSING

(A Hand-Out)

SYSTEMATIC NURSING

INTRODUCTION :

The purpose of this handout is to explain briefly what is meant by Systematic Nursing and outline the approach towards it. Our beliefs about man, his environment, society, health and illness influence our ideas about nursing. For a long time, the concept of nursing had been serving the sick alone, mainly attending to their physical needs. In recent years, many changes have occurred in nurse education. Nursing has emerged as a respectable profession increasingly based on scientific knowledge. Nurses should have adequate knowledge in order to care for patients and clients intelligently and effectively. A brief description of nursing and nursing care will lead us on to Systematic Nursing and how to go about it.

NURSING :

The question that we should ask here is "What is Nursing?" The term nursing is considered as a verb, an action word, is defined in the dictionaries by the use of the noun nurse-for example to act as, or be employed as, a nurse. A nurse is defined as one trained to care for and wait upon the sick, injured or infirm under the direction of a physician" (Orem 1980 P.14).

King (1973) defines nursing as "a process of action, reaction, interaction and transaction whereby nurses assist people of any age group, meet their basic needs in performing activities of daily living and cope with health and illness at some particular point in the life cycle."

The definition of nursing by Henderson (1966) is more comprehensive. "The unique function of the nurse is to assist the individuals, sick or well in the performance of those activities contributing to health or its recovery (or to peaceful death) that he would perform unaided if he had the necessary strength, will or knowledge. And to do this in such a way as to help him gain independence as rapidly as possible." This concept of self care and substitute care makes the definition of nursing more comprehensive. Watson (1979) believes that nursing is a caring science.

NURSING CARE :

"Nursing Care refers to those aspects of nursing that are intrinsic to the actual nurse-patient/client process that produces therapeutic results in the person being served" (Watson 1979). Watson refers to this basic care of nursing as comprising the philosophy and science of caring. Caring implies that the nurse is concerned about the patient, his health, illness problems, and his family and the help or assistance the nurse renders to the patient and his family to cope with the health and illness problems. In medicine curative factors aim at curing the disease of the patient. Similarly in nursing caring factors aim at the caring process that helps the person attain or maintain health or die a peaceful death.

The above discussion reflects on our beliefs about the nature of man and nursing. This enables us to plan nursing care accordingly.

If we believe that man is a biosocial being constantly interacting with his environment, we also appreciate that he has physical, psychological, social and spiritual aspects to his make up. An individual is a unified whole. If this is our belief about the nature of man, then the nurse has to view each person as an 'individual' (recognition of individual worth) each individual is 'unique' (recognition of uniqueness) and each individual is a 'total person'(recognition of wholeness or totality of the person).

2

In planning nursing care the nurse has to take the individual's physiological, psychological social and spiritual needs into consideration. A need is a situation that requires an intervention. An unmet need becomes a problem. In order to do this the nurse has to make use of the knowledge from the biological and social sciences. This approach is a scientific approach to nursing care. It is a systematic and problem solving approach hence it is also called 'Systematic Nursing' or 'Nursing Process'.

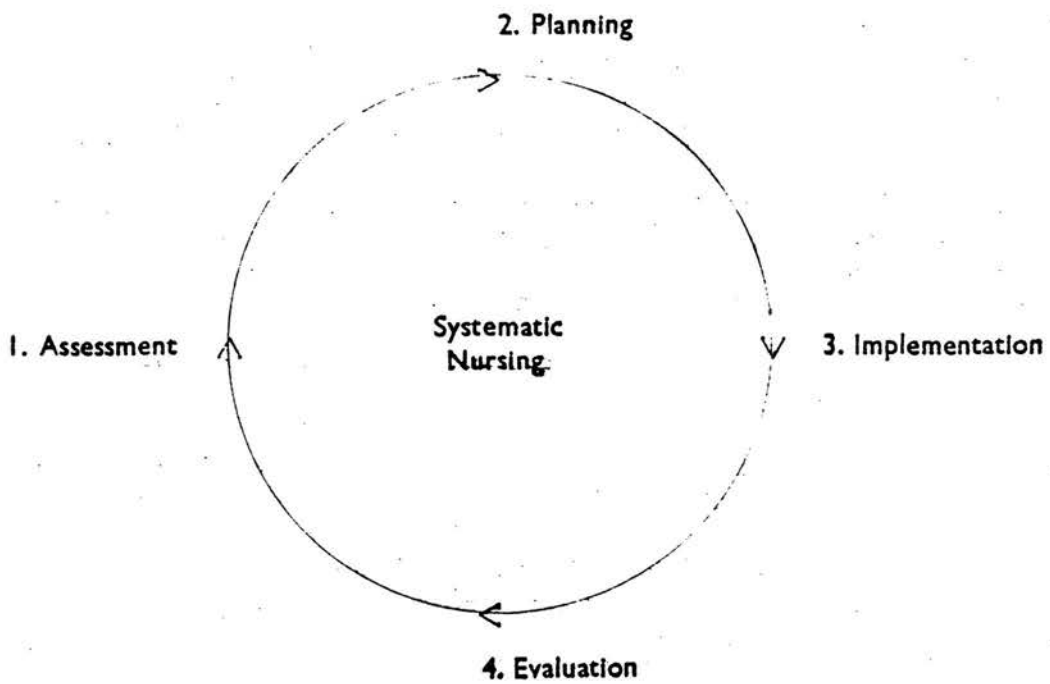
SYSTEMATIC NURSING :

Systematic Nursing is a systematic way of assessing the patients' needs, planning the care, implementing and evaluating the outcome of care given. Bower (1977) defines nursing process (Systematic Nursing) as systematic method of planning action. The process of planning of nursing care is a systematic step by step method of selecting an action or actions to reach a desired goal. It is a decision making process. It includes both cognitive and activity components. The goal of planned nursing care is to help the individual or the family to reach a state of high level wellness.

PHASES OF SYSTEMATIC NURSING :

The most commonly identified phases of Systematic Nursing are :

1. Assessment 2. Planning 3. Implementation and 4. Evaluation



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ASSESSMENT :

Assessment is a systematic process of collecting data focussing on the total person. The assessment process requires observation, integration of interpersonal skills knowledge from biological and social sciences, psychomotor actions, laboratory and diagnostic tests, information from other staff members and patients' relatives and nursing theories. Through this process, patients' physiological, psycho social and spiritual problems are identified, analysed and interpreted. An assessment form or nursing history sheet is used for this purpose.

PLANNING:

Planning is the determination of what can be done to assist the patient. It involves formulating objectives, judging priorities and designing methods to resolve problems.

The Nursing care plan is a plan of care for the patient. Ideally it is prepared with the patient and available to everyone concerned with the care of the patient including the patient himself. The care plan includes: a) a statement of each problem b) a goal or aim for each problem identified.

IMPLEMENTATION :

Implementation is the actual carrying out of the care planned. It is carrying out the interventions in order to achieve the objectives set. This also includes documentation. Once the nursing care is developed, the implementation phase begins. Planned action may be instituted. This depends on intellectual, interpersonal and technical skills of the nurse. Decision making, observation and communication are significant skills. Several nursing actions may be necesssary to solve one problem or one specific nursing action may solve more than one problem.

EVALUATION :

Evaluation is concerned with measuring the effectiveness of nursing care against the objectives set. This phase indicates which problems have been solved and which ones need to be reassessed, replanned, implemented and evaluated. This provides feedback to improve the care.

SUMMARY :

In order to provide comprehensive nursing care or individualised patient care, the nurse has to identify the individual's physical, psychological, social and spiritual needs. She then has to prioritise the needs and plan care accordingly. The planned care has to be implemented and the outcome of the care has to be evaluated. The nurse patient interaction plays an important role in the process of nursing. It is a problem solving approach which is a systematic approach in nursing. This process of assessing, planning, implementing and evaluating nursing care is known as Systematic Nursing or Nursing Process. Documentation is implicit in all four phases.

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4

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APPENDIX 16

AN APPROACH TO SYSTEMATIC NURSING

(A Published Article)

An Approach to Systematic Nursing

Ms. ESTHER SIRRA

Introduction

The purpose of this article is to discuss changing concepts of Nursing and to outline briefly Systematic Nursing and the phases involved in implementing this approach. Systematic Nursing is a new concept which is a scientific and problem-solving approach in Nursing. 'Nursing Now', an article published in *The Nursing Journal of India*, (September, 1983 Vol. LXXIV, No. 9) made me think aloud and prepare this article for nurses in India.

Is the concept of Nursing in India changing? If so, this article will help one understand the changing concept a little better.

The Health Care System and Nursing in India

It seems that the health care system in India is fast changing and aiming at providing comprehensive health service to all people in the country. Samuel, J. (1983) states that because of the changing health delivery system, the role of the nurse is also changing. Nurses have assumed a variety of responsibilities. Recent advances in technology have resulted in specialised Nursing practices in intensive care units, coronary units, transplant care, community health services, and so on. Nurses are receiving advanced education in such specialities and nurse educators in India are planning to teach the Nursing process.

For these reasons nurse education in India is fast advancing. It is four decades now since India started a 'Bachelor's programme for nurses and two decades since 'Master's' level programme was instituted. A number of nurses have gone through university education and acquired knowledge in biological and social sciences. Despite all these striking changes in nurse education, Nursing practice is still based on the traditional medical model and is task-oriented in many hospitals. It is not only gaining knowledge that is important but it is the ability and opportunity to apply that knowledge in the care of the patient that is so. Nursing has to take a new direction. In order to provide individualised patient care Nursing must be reorganised round the individual needs of the patient.

What is Nursing?

Many authors found it difficult to define Nursing because Nursing is so complex. Considering a few definitions will help us understand the concept better.

"Nursing is action. The term Nursing is considered as a verb, an action word, is defined in the dictionaries by the use of the noun, for example, to act as or be employed as a nurse. A nurse is defined as one trained to care for and wait upon the sick, injured or infirm under the direction of a physician". (Orem:1980, p. 14)

"Nursing is an encounter with a client and his family in which the nurse observes, supports, communicates, ministers, and teachers; she contributes to the maintenance of optimum health and provides care during illness until the client is able to assume responsibility for the fulfilment of his own basic human needs. When necessary she provides compassionate assistance with dying". (Yura & Walsh:1978).

King (1973) views Nursing as "a process of action, reaction, interaction, and transaction whereby nurses assist people of any age group, meet their basic needs in performing activities of daily living and cope with health and illness at some particular point in the life cycle".

Whether Nursing is caring for the patients and his family or an encounter with the patient the essence remains the same. Henderson (1966) has given a comprehensive definition: "The unique function of the nurse is to assist the individuals, sick or well, in performing those activities contributing to health or its recovery (or to a peaceful death) that he would perform unaided if he had the necessary strength, will or knowledge. And to do this in such a way as to help him gain independence as rapidly as possible."

This definition implies comprehensive care, self care and substitute care. The nurse substitutes for what the patient lacks to make him 'complete', 'whole' or 'independent'. Henderson further states that this aspect of her work, this part of her function, she initiates and controls, of this she is the master. "The nurse must in a sense get inside the skin of each of her patients in order to know what he needs."

Nursing: A Scientific Method

The definitions of Nursing given by different authors emphasised the caring aspect of Nursing. Watson (1979) states this caring aspect of Nursing as science of caring. The dictionaries give meanings for science as knowledge, knowledge ascertained by observation and experiment, critically tested, systematised and brought under general principles, a department or branch of such knowledge or study, a skilled craft, trained skills and so on. Even though the above meanings of science are applicable to Nursing, it is sad to note that Nursing has not been recognised as a science.

Nursing Care

Nursing care refers to those aspects of Nursing that are intrinsic to the actual nurse-patient/client process that produces therapeutic results in the person being served (Watson: 1979). Watson refers to this basic care of Nursing as comprising the philo-

sophy and science of caring. Curative factors aim at curing the disease of the patient and caring factors aim at the caring process that helps the person attain or maintain health or die a peaceful death. These caring factors are deeply human activities.

Caring implies that the nurse is concerned about the patient, his health, illness problems and his family and the help or assistance the nurse renders to the patient and his family to cope with the health and illness problems. The nurse helps the patient to find solution to his problems. Caring includes prevention of illness, promotion of health, maintenance of health and rehabilitation.

In order to do this, Nursing has to be brought under knowledge, knowledge ascertained by observing the patients, tested and systematised.

Systematic Nursing

What is Systematic Nursing? The term Systematic Nursing may sound new to many nurses in India. Let me explain what it means. Perhaps considering a few definitions will help us to understand this new concept better.

A systematic way of assessing the patient's needs, planning the care, implementing and evaluating the outcome of care given is described as Systematic Nursing. It is a scientific and problem-solving approach in Nursing. In this caring science our concern is the patient and his family, prevention of disease and promotion of health. Systematic Nursing is the process of Nursing or Nursing itself.

In the USA the explosion of discontent had stimulated a series of research projects which eventually lead to the application of scientific principles to the provision of Nursing care at an earlier stage than in UK. Application of scientific principles in Nursing practice produced the Nursing process which is a systematic method and problem-solving approach in Nursing. There is an increased awareness and interest in implementing Systematic Nursing in the UK and some research projects were undertaken. Usage of Nursing history sheet assessment, Nursing care plan and evaluation sheets was demonstrated with successful results.

Nursing process is a conscious and active thinking and decision making in which Nursing action is planned and implemented on the basis of the assessment of needs and the results of Nursing actions are evaluated". (Marriner: 1975)

Marriner further describes Nursing process as a systematic method of planning action or actions to reach a desired goal. It is a decision-making process. It includes both cognitive and activity components. The goal of planned Nursing care is to help the individual or the family reach a state of high level of wellness. The technical, behavioural, and intellectual skills of Nursing practice are based upon theories and principles from the physical and social sciences. All of these elements are utilised in the Nursing process and thus in planning care. The starting point of Nursing process is a conception of the human being from which the standards and the fundamental principles of the Nursing care has to be determined.

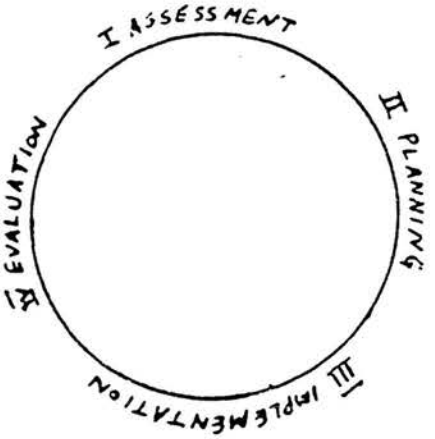
Technical skills are those skills of Nursing which range from simple to complex and from supportive to restorative. These skills must be used with intelligence and a high degree of skill and discrimination. Behavioural skills refer to skills that are needed for communication and interpersonal relationships. Intellectual skills refer to creative thinking, defining problems and deciding upon a course of action.

Long (1981) describes Nursing process as : 1. The patient is an individual and needs individual care. 2. The patient and those close to him need to participate and be consulted about the care. 3. Nursing staff need to communicate more with each other in giving care. Trained Staff, learners, agency nurse and Nursing auxiliary participate together in assessing the patient needs and planning care.

Long emphasises that in order to do this the nurse needs to rediscover the nature of Nursing which can be defined simply as helping the patient with ordinary things that temporarily or permanently he is unable to do for himself, both physical and psychological. The aim of Nursing process is to recognise the patient as a person, an individual, a total being with physical, psychological, social and spiritual needs, in his day-to-day living and the kind of care he needs in meeting or satisfying these needs, and the goals to be achieved by providing such care.

The Many Phases

The Nursing process does not suggest one exact route of providing patient care; the choice of routes vary. Various authors describe the process in various phases. Some describe six phases, some five and some four. However, they are similar rather than being different. The four commonly agreed phases are : (1) Assessment, (2) Planning, (3) Implementation and (4) Evaluation. One phase leads to the other and is an ongoing process.



Phase I : Assessment : Nursing assessment is a systematic process of collecting patient's data focusing on the total person. The assessment process requires observation, integration of interpersonal skills. knowledge from biological and social sciences, psychomotor actions, laboratory and diagnostic tests, information from other staff members and patient's relative and Nursing theories. Through this process patient's physiological, psychological, social and spiritual problems are identified, analysed and interpreted.

According to Yura & Walsh (1978) assessing is the act of reviewing a situation for the purpose of diagnosing the client's problems. This phase includes : (1) Collecting information (data) about the person. (2) Interpreting the data collected. (3) Identifying the needs of the patients for care. (4) Validating the identified needs. (5) Setting priorities for care.

A structured admission sheet, or an assessment form or a Nursing history sheet are made use of for the purpose of collecting data.

Phase II : Planning : "Planning is the determination of what can be done to assist the client. It involves setting goals, judging priorities and designing methods to resolve problems" (Yura & Walsh : 1978)

Various terms are used to describe planning : Nursing care plan, Nursing prescription and Nursing order. These are tools which help to identify the Nursing activity specific to an individual patient.

Kratz (1982) suggests four stages for planning care : (1) Determining priorities : Analysing the problems to decide which problems require priority attention. (2) Setting goals : This states what is to be achieved if the identified problems are to be alleviated. (3) Setting Nursing actions : This involves choosing methods and techniques which will enable to achieve the stated patient's goals. (4) Writing the care plan : The problems, goals and Nursing actions are recorded on the patient's Nursing care plan.

It is an ongoing process and needs to be reviewed from time to time.

Phase III : Implementation: Implementation is the actual carrying out of the care planned. Implementation is defined by WHO (*Nursing Process Work Book*: WHO/EURO/NURSG 76.1) as "carrying out interventions directed toward the accomplishment of specific objectives". The interventions comprise what the nurse does for, with and to a person in order to achieve objectives of care, including the documentation of specific Nursing intervention on the Nursing care plan.

Once the Nursing care plan is developed the implementation phase begins which is a very important step. Planned action may be instituted by the nurse/client/nurse or Nursing team/the client or his family. Implementation of Nursing process depends on intellectual interpersonal and technical skills of the nurse.

The Nursing care plan is an important tool to carry out the actual care planned according to the objectives.

Phase IV : Evaluation: Evaluation is defined as "a continuous process through which appraisal of effectiveness of the previous steps in meeting the patient's needs are provided" (Marriner: 1979).

It is measuring the effectiveness of care given to the patient against the objectives set in meeting the needs of the patient. This phase of Nursing process indicates which problems have been solved, which ones need to be assessed, replanned, implemented and evaluated. Evaluation is an ongoing process and provides feedback to give effective care to the patient. Effectiveness and efficiency of Nursing care are both considered as well as alternative approaches.

Systematic Nursing and Nursing Models

As Systematic Nursing provides a problem-oriented scientific approach to Nursing, a Nursing model provides a framework or pattern to follow. It gives a direction to act. Since many of these ideas are abstract these are presented in the form of a model. Different theorists have developed different conceptual models for practice. These are known as Nursing models.

The conceptual frameworks are based on the beliefs about man, goals of Nursing and the knowledge on which practice is based. Some examples of such models are: (1) The activities of living model—(Roper, Logan and Tierney) (2) The Self-Care Model —(Orem) (3) The Stress Adaptation Model (Saxton and Hyland) (4) Unified Model-Riehl and Roy (5) The Holistic model.

Each of these models can serve as a framework for assessment of each phase of Systematic Nursing thus giving direction and making it purposeful.

Summary

In order to provide comprehensive Nursing care or individualised patient care, the nurse has to identify the individual's physical, psychological, social and spiritual needs. She then has to prioritise the needs and plan care accordingly. The planned care has to be implemented and the outcome of the care has to be evaluated. The nurse-patient interaction plays an important role in the process of Nursing. It is a problem solving approach which is a systematic approach in Nursing. This process of assessing, planning, implementing and evaluating Nursing care is known as Systematic Nursing or Nursing Process. Documentation is implicit in all four phases. A Nursing model provides a framework or pattern to follow and gives a direction to act.

The author of this article is a Nursing research student at the University of Ediburgh. She has undertaken a research project on implementing Systematic Nursing in selected hospitals in India, namely, Christian Medical Centre, Pithapuram, and Narsapur Christian Hospital.

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Note: Further references were omitted in publication.

APPENDIX 17a

USING NURSING MODELS FOR NURSING PRACTICE

(An Article in Press)

USING NURSING MODELS FOR NURSING PRACTICE

Part 1

INTRODUCTION

In the first article on systematic nursing published in the Nursing Journal of India, January 1986, I discussed the meaning of systematic nursing and the phases involved in it. It was also mentioned that a nursing model provides a framework for the phases of nursing practice, and gives a direction to action. I am aware of the fact that nursing models for nursing practice are quite a new idea for nurses in India. As I lectured on systematic nursing in two study hospitals in India, between December 1984 and March 1985, I could sense the growing interest of nurse educators and nurse administrators in learning more about systematic nursing and its application in clinical practice. The session on nursing models captured their attention and they actively participated in the practical sessions. My aim in presenting this article is to introduce nursing models to nurses in India. I intend to do this in three parts: 1) introducing terminology; 2) presenting the 'holistic model'; and 3) presenting three selected models namely - the Roper, Logan and Tierney (1980) model for nursing which focuses on the activities of living, the Orem (1980) self-care model and the Saxton and Hyland (1979) stress adaptation model.

The terminology used is discussed in this article as it is important for us to familiarise ourselves with it, in order to understand the models better.

A CONCEPT

Chambers dictionary (1974) gives the following meanings for a concept: a general notion; the formation of power or power of forming in the mind; a plan or thought. Rines and Montag (1976) describe a concept as:

> "a general notion or idea, an idea of something formed by mentally combined or initiated object of thought."

In simple words we can say that a concept is a general idea or a notion or an image formed by the mind. Concepts can be labels, objects or the characteristics of objects. Some examples are love, hate, will, peace, space and time.

A MODEL

A model is a pattern or framework of a mental image depicting the reality. Riehl and Roy (1980) state:

> "a model is a conceptual representation of reality. It is not clearly the reality itself, but an abstracted and reconstructed form of reality."

Perhaps I could give an example here. If we take the individual's need - a need is something abstract, we cannot see it but we can conceptualise and present in in the form of a model. Therefore we can say that a model is a symbolic representation of the various aspects of a complex event or situation, and their interrelationships.

A CONCEPTUAL MODEL

The terms conceptual model and conceptual framework are synonyously used. These terms refer to global ideas about individuals, groups, situations and events of interest to a discipline. Fawcett

(1984) describes that conceptual models are made up of concepts, which are words describing mental images of phenomena, and propositions, which are statements expressing the relations between concepts. According to Fox (1982) a conceptual framework is a general amalgam of all of the related concepts in the problem area.

A NURSING MODEL

A nursing model is a conceptual framework for nursing practice. Johnson (1975) explains that a nursing model for nursing practice is a systematically constructed and logically related set of concepts which identify the essential components of nursing practice, together with the theoretical basis for those concepts. Johnson further states that a nursing model is made up of general ideas and concepts. The parts are related to each other through a cohesive and systematic approach to the patient. So a nursing model represents our concepts about man, his health and illness problems, and the type of care he needs.

In recent years a number of nurse theorists have developed various conceptual models for practice. These models are based on the beliefs about man, values, goals of nursing and the knowledge on which practice is based. As such, a nursing model offers a global understanding of man and serves as a framework for assessment of each phase of systematic nursing, thus giving direction and making it purposeful. Some examples of such models are:

Johnson (1980) behavioral system model

King (1981) open system model

Orem (1980) self-care model

Rogers (1970) life process model

The Roper, Logan and Tierney (1980 model for nursing which focuses on the activities of living

Roy (1980) adaptation model

Saxton and Hyland (1979) stress adaptation model

Components of a Model

Three components of a model are commonly identified by the nurse theorists. These are:

- beliefs about man
- the goals of nursing
- the knowledge on which practice is based.

Following is the diagram of these components presented by the authors of the self-learning package entitled A Systematic Approach to Nursing Care: An Introduction, published by the Open University of the U.K. in 1984.

Fig. 1: Components of a Model for Practice

Reproduced by permission from the Open University (1984) - A Systematic Approach to Nursing Care: An Introduction, Milton Keynes, p 15.

Giving simple examples here may help our readers to understand the components of a model. If we believe that an individual is a biological being, our goal is to cater for his physical needs and nursing practice is mainly procedure centered, making use of knowledge mainly from biological sciences such as Anatomy and Physiology. On the other hand if we believe that an individual is a biosocial being, our goal is to care for the total person, and we make use of the knowledge from both biological and social sciences. This results in comprehensive care or total care of the patient who is a person and an individual. This concept leads us to the 'holistic model'.

APPENDIX 17b

THE HOLISTIC MODEL

(An Article in Press)

THE HOLISTIC MODEL

Part 2

One can construct a model by incorporating different elements from different models. Our beliefs, values and ideas determine and guide our nursing practice. The author of this article developed a 'Holistic Model' for nursing practice in September 1984. The holistic model makes use of elements from different models, for example, Rogers' (1970) view of unitary man, Bower's (1977) holistic theory, Maslow's (1954) hierarchy of needs, Orem's (1980) concept of self-care, Henderson's (1966) fourteen points of activities of daily living and, Roper et al's (1983) the model for nursing. Description of the holistic model is given below.

The individual is a unified whole constantly interacting with his environment. The individual has physiological, psychological, social and spiritual aspects to his person. In the process of life the individual constantly strives to fulfil his needs arising from physio, psychosocial and spiritual aspects. These needs are interrelated.

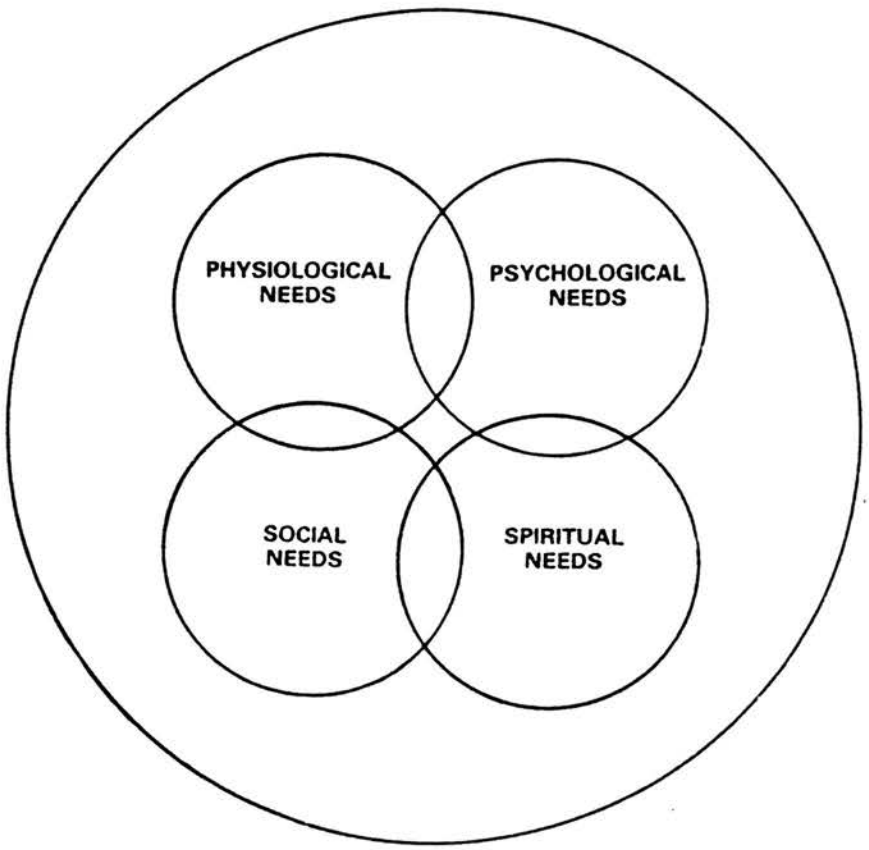

Fig. 2: Individual a Unified Whole

During the life process the individual is constantly engaged in performing a number of activities in order to meet his needs. These activities are essential for daily living. These may be called activities of daily living, activities of living or daily living activities. Henderson (1966) identified fourteen activities of daily living:

- breathe normally
- eat and drink adequately
- eliminate body wastes
- move and maintain desirable posture
- sleep and rest

- select suitable clothes - dress and undress
- maintain body temperature within normal range by adjusting clothing and modifying the environment
- keep the body clean and well groomed and protect the integument
- avoid danger in environment and avoid injuring others
- communicate with others in expressing emotions, needs, fears or opinions
- worship according to one's faith
- work in such a way that there is a sense of accomplishment
- play or participate in various forms of recreation
- learn, discover, or satisfy the curiosity that leads to normal development and health and use the available health facilities

These activities may be grouped into:

1. activities that are related to physiological needs
2. activities that are related to psychological needs
3. activities that are related to social needs and
4. activities that are related to spiritual needs

The interrelatedness of the activities of daily living and the physio, psychosocial and spiritual needs is shown in a diagrammatic form.

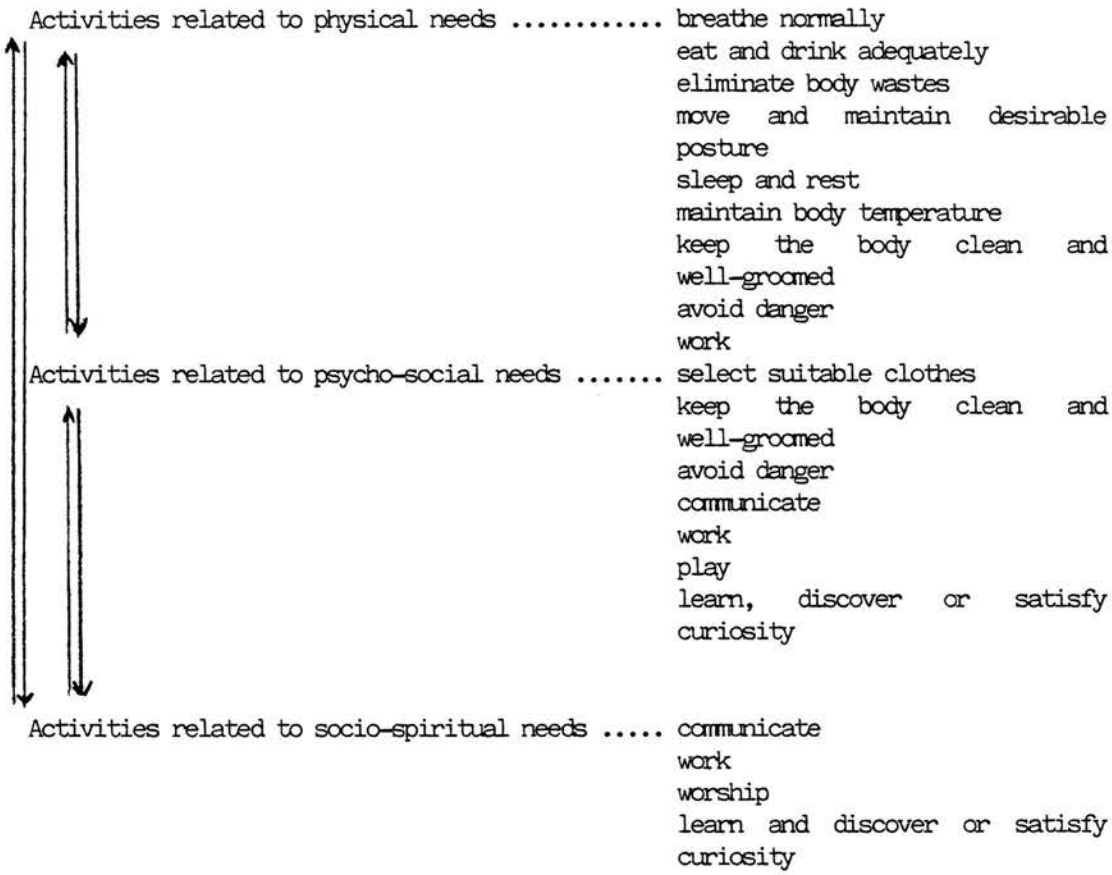

Figure 3: The Interrelatedness of the Activities of Daily Living and the Physio, Psychosocial and Spiritual Needs

Performing a single activity may result in meeting more than one type of need, or more than one activity may have to be performed in order to meet one type of need. In performing the activities of living, the individual may be completely independent, partially dependent or totally dependent, depending on his age and state of health. However, during the life-span there is some amount of dependence in every individual in performing one activity or the other at a given time. When an activity cannot be performed by an individual because of his age, ill health or accident, the need is left unmet. An unmet need becomes a problem, which requires an intervention. The degree of intervention varies depending on the

state of the individual. Concepts of individual care, self-care and substitute care should be taken into consideration.

Nursing deals with the caring process. The nurse needs to understand biological and social sciences in order to plan care based on sound scientific principles. The biological sciences help the nurse to understand the structure and functions of the body. This knowledge enables the nurse to assist the patient/client with the activities of daily living, depending on the degree of dependence and independence. Social sciences help the nurse to have an understanding of patients' psychological and social state, interpersonal relationships, family relationships and social interactions.

A good grounding in biological and social sciences helps the nurse to assess patients' problems, plan the type of care and decide on nursing intervention to meet the goals of nursing. In order to plan 'comprehensive nursing care' or 'total care' or 'holistic care', the totality or the wholeness of the individual must be taken into consideration. Where the wholeness of the individual is not taken into consideration, the care becomes fragmented. This model emphasises the principles of wholeness, uniqueness, individuality and interaction while planning the care.

Components of a Holistic Model

The three components of a holistic model are described here:

Beliefs about man - this model is based on the belief that an individual is a unified whole having physiological, psychosocial, and spiritual aspects which are interrelated. Problems

may arise from these aspects at any point during the life cycle.

The goals of nursing - are developed from the link between the needs of the unified man and his ability to carry out these activities of daily living in order to meet his needs or help him solve his problems. The goals of nursing reflect the individual's problems and the patient's/client's ability to carry out the activities of daily living, taking individualised care, self-care and substitute care into consideration. Nursing is viewed as helping the patient/client to solve, alleviate or cope with the health and illness problems. It also includes the preventive aspect of care.

The knowledge base - this model makes use of the knowledge from biological and social sciences in order to understand the individual needs of a total person. Biological sciences help the nurse to understand the structure and functions of the body and the problems that may arise from the physiological aspects which in turn affect the individual's ability to carry out the activities of living effectively. Social sciences help the nurse to understand the psychosocial problems of the patient. Spiritual problems are taken into consideration. The nurse also assesses the ability of the patient to carry out the activities of daily living, and decides the amount of assistance needed by the patient. The model incorporates the four phases of systematic nursing, that is, assess patient's problems, formulate objectives, plan care, implement and evaluate the effectiveness of care given in the light of

objectives set.

Application of a Holistic Model

Mr. Rao is a 65-year old Hindu who was brought to the hospital on a rickshaw and admitted to a surgical ward. He had fallen while he was reaching for an object on a table and sustained a fractured neck of left femur. Mr. Rao is a retired policeman and lives with his wife in his own house, which is quite adequate for them. They have three sons and two daughters, all are educated, employed and well settled. Mr. Rao spends a lot of time reading newspapers and says that he is an atheist.

The following assessment was made on his activities of daily living (hereafter to be referred to as ADL). Mr. Rao is well nourished, has no dietary restrictions, and is not allergic to food or medicine. He needs assistance with feeding, elimination and hygiene as he is unable to move because of the fracture. He has no problem with breathing and he sleeps well, 6-8 hours in a day. There is no problem with his senses but he has severe pain in his left hip owing to the fracture. Mr. Rao is very depressed because of his inability to move and help himself with the ADL. He also feels that he is a burden to his family as hospitalisation is expensive and at times he is reluctant to talk to his relatives. Mr. Rao blames god for allowing such a thing to happen which has made him dependent on the nurses and his family members.

The following problems are identified:

severe pain in left hip	physiological problem
immobility	physiological problem
unable to attend to his nutrition, elimination and hygiene	physiological problem
depression and worry about hospital bills	psychological problem
reluctance to speak to his relatives	social problems
hostility towards god	spiritual problem

Normally Mr. Rao would perform ADL by himself but now that he has sustained a fracture he is dependent on nurses and his relatives. He needs assistance with activities like feeding, elimination, hygiene and mobility.

The nurse takes a holistic approach in understanding Mr. Rao's problems and their interrelatedness. For example, depression though a psychological problem, is related to his immobility which is a physiological problem. Thus the nurse understands Mr. Rao as a 'total person' and as an 'individual'. She also understands his self-care ability and his level of dependence and independence in performing the ADL. The nurse aims to help him solve his problems in order to make Mr. Rao independent as rapidly as possible. She formulates objectives, plans care, implements and evaluates the outcome of care given. The three selected models will be presented later.

SUMMARY

A model is a pattern or framework of a mental image depicting the reality. A nursing model is a conceptual framework for nursing practice. It is a systematically constructed, scientifically based and logically related set of concepts which identify the essential components of nursing practice. A number of models have been developed by nurse theorists in recent years. These models are based on beliefs about man, goals of nursing and the knowledge on which nursing practice is based. The author of this article developed the 'Holistic Model'. She believes that the individual is a unified whole having physiological, psychological, social and spiritual aspects which are interrelated and problems may arise from these aspects at any point during the life-cycle. The goals of nursing are to help the patient/client solve, alleviate or cope with the health and illness problems. It also includes the preventive aspect. The 'holistic model' makes use of knowledge from biological and social sciences. The nursing model influences the content of systematic nursing and gives direction to nursing practice, making it purposeful.

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Footnote This is a slightly amended version of an article accepted for publication in the Nursing Journal of India. The article was written during the period of field work and the present tense was therefore used throughout.

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